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ENGLISH

User Guide

LG-D415RD

MFL68320401 (1.0) BC

www.lg.com

English

LG-D415RD User Guide

- Screen displays and illustrations may differ from those you see on the actual phone.
- Some of the contents of this guide may not apply to your phone, depending on the software and your service provider. All information in this document is subject to change without notice.
- This handset is not suitable for people who have a visual impairment due to the touch screen keyboard.
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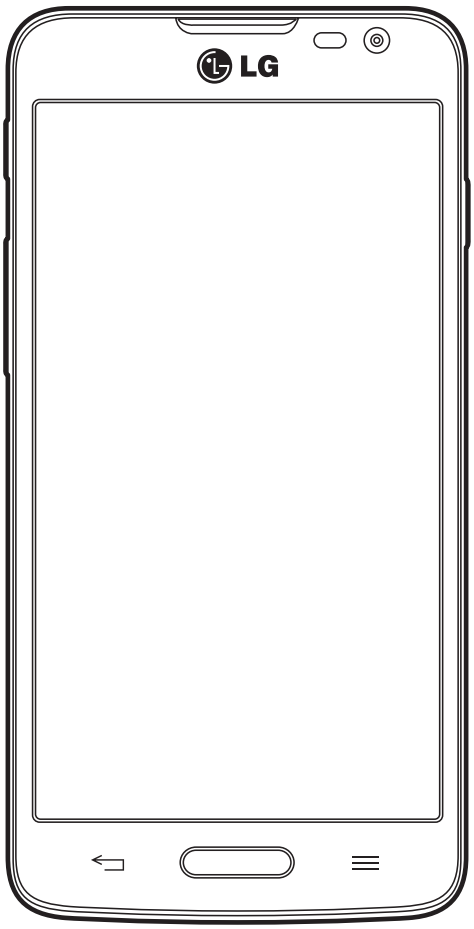

SERVICE ACTIVATION

If you are a new T-Mobile® customer and your service has not been activated, simply call Customer Care at **1-800-937-8997** from your landline phone and a T-Mobile Activations representative will assist you. You will need the following information when activating service:

- Service Agreement and agent code on your Agreement.
- Your name, home address, home phone, and billing address.

NOTE: For business and government accounts, please provide the name of your company or government agency, address, and tax ID.

- Your Social Security number, current driver's license number, and date of birth for credit check purposes.
- Your choice of T-Mobile rate plan and services (see www.t-mobile.com for the latest plan information).
- SIM serial number and IMEI number (located on the box bar code label).

By activating service, you acknowledge that you have read, understand, and agree to be bound by each of T-Mobile's Terms and Conditions and your Service Agreement.

About this user guide

Please read this user guide carefully before you use your phone and keep it handy for future reference.

Should your phone fails to operate correctly, refer to the FAQ section.

- Some features and service may vary by area, phone, carrier, plan and version of phone software.
- Screen displays and illustrations on this user manual may differ from those you see on the actual phone.
- Designs and specifications of the phone and other accessories are subject to change without any notice.

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Important notice

Before you start using the phone, please read this!

Please check to see if any problems you have encountered with your phone are described in this section before taking the phone in for service or calling a service representative.

1. Phone Memory

In order to make more memory available, you will have to manage your applications and delete some data, such as applications or messages.

Managing applications

1 From the Home screen, tap **Apps** > **Settings** > **General** tab > **Apps.**

2 When the list of applications appears, scroll and tap the application you want to disable.

3 Tap **Uninstall** and then tap **OK** to confirm that you want to uninstall the desired application.

To stop applications

1 From the Home screen, tap **Apps** > **Settings** > **General** tab > **Apps.** and select the **RUNNING** tab.

2 Select the desired application and tap **Stop** to stop it.

2. Optimizing Battery Life

You can extend your battery's life between charges by turning off features that you don't need to run constantly in the background. You can also monitor how applications and system resources consume battery power.

To extend the life of your battery

- Turn off radio communications that you aren't using, such as Wi-Fi, Bluetooth, or GPS.
- Lower screen brightness and set a shorter screen timeout.

- Turn off automatic syncing for Gmail™, Calendar, Contacts, and other applications.
- Some applications you have downloaded may cause your battery power to be reduced.
- While using downloaded applications, check the battery charged level.

To view the battery charge level

1 From the Home screen, tap **Apps** > **Settings** > **General** tab > **About phone** > **Battery**.

2 The battery status (charging or discharging) and level are displayed on the top menu of the screen.

To monitor and control what uses the battery

1 From the Home screen, tap **Apps** > **Settings** > **General** tab > **About phone** > **Battery** > **Battery use**.

2 The bottom of the screen displays battery usage time and also lists applications or services using battery power from greatest amount to least.

3. Installing an Open Source Operating System

Installing an open source operating system on your phone and not using the operating system provided by the manufacturer can cause your phone to malfunction.

Warning!

- If you install and use an OS other than the one provided by the manufacturer, your phone is no longer covered by the warranty.
- To protect your phone and personal data, download applications only from trusted sources, such as Play Store. If some applications are not properly installed on your phone, your phone may not work properly- or serious errors may occur. You will need to uninstall those applications and all of its data and settings from the phone.

4. Using a screen lock

Set a screen lock to secure your phone from unauthorized use. To set the screen lock, follow the process below.

From the Home screen, tap **Apps** > **Settings** > **Display** tab > **Lock screen** > **Select screen lock** and select from **None, Swipe**, **Face Unlock**, **Pattern**, **PIN** or **Password**.

NOTE: In case that you have trouble with Face Unlock, you can unlock the screen with a pattern and/or PIN as a backup.

Warning! Take precautions when using an Unlock Pattern, PIN, or Password. It is very important that you remember the screen unlock information you set. You are allowed 5 attempts to enter your screen unlock information. If you used up all 5 opportunities, you will have to wait 30 seconds to attempt unlocking the phone again.

When you can't recall your Unlock Pattern, PIN, or Password:

If you logged into a Google account on the phone and failed to use the correct pattern 5 times, tap **Forgot pattern?** You will be required to sign in with your Google account and prompted to create a new unlock pattern.

If you have set a backup PIN, you can unlock the screen by entering the backup PIN.

If you haven't created a Google account on the phone or you forgot your PIN or Password, you need to perform a hard reset.

5. Using Hard Reset (Factory Reset)

If your phone needs to be restored to its original condition, use a Hard Reset to initialize your phone.

Warning! If you perform a Hard Reset, all user applications and user data will be deleted. Please remember to back up any important data before performing a **Hard Reset**.

1. Turn the power off.
2. Press and hold the **Power/Lock Key** + **Volume Down Key** on the phone.
3. Release the **Power/Lock Key** only when the LG logo is displayed, then immediately press and hold the **Power/Lock Key** again.
4. Release all keys when the Factory data reset screen is displayed.
5. Press the **Volume Key** to scroll to the desired option, then press the **Power/Lock Key** to confirm.

6. Using Safe Mode

To recover your phone when malfunctioning.

1. Turn off your phone and reboot. When you see the T-Mobile animation press and hold the **Volume Down Key** until the phone reboots. Your main screen will then be displayed with the words "Safe mode" in the lower left corner.
2. From the Home screen, tap the **Menu Key** and tap **System settings** > **General** tab > **Apps**.
3. Tap one of the available tabs at the top of the screen and select the application you wish to uninstall.
4. Tap **Uninstall** and **OK** to confirm.
5. After uninstalling the application, turn off and reboot your phone.

7. Using a microSD Card

Pictures, music and video files, can be saved to external memory. Before saving these files to external memory, you need to insert a microSD card. If you have not inserted a microSD card, your items will be saved to internal memory.

Warning! Do not remove the microSD card without unmounting it first. Otherwise, it may damage the microSD card as well as your phone, and the data stored on the microSD card may be corrupted. To unmount the microSD card, from the Home screen, tap the **Menu Key** and tap **System settings** > **General** tab > **Storage** > **Unmount SD card**.

8. Connecting Your Phone to a Computer via USB

1. Use the USB cable that was provided with your phone to connect the phone to a USB port on your computer. You'll receive a notification that the USB is connected and can see USB connection type pop-up.
2. Tap **Media sync (MTP)** to confirm that you want to transfer files between your phone's microSD card and the computer.

When the phone is connected as USB storage, you receive a notification. Your phone's microSD card is installed as a drive on your computer. You can now copy files to and from the microSD card.

9. Opening and Switching Applications

Multi-tasking is easy with Android because you can keep more than one application running at the same time. There's no need to quit an application before opening another. Use and switch between several open applications. Android manages each application, stopping and starting them as needed to ensure that idle applications don't consume resources unnecessarily.

TIP! To return to a recent application, press and hold the **Home Key** . The screen then displays a list of applications you have recently used.

10. Unlock the Screen

Your screen will go dark if untouched for a period of time when using a data connection. To turn on your screen, press the **Power/Lock Key**c.

11. Hold the Phone Straight Up

Please hold the mobile phone straight up as a regular phone.
While making/receiving calls or sending/receiving data, try to avoid holding the lower part of the phone where the antenna is located. It may affect call quality.

12. When the Screen Freezes

If the phone does not respond to user input or the screen freezes:

Remove the battery, reinsert it, then turn the phone on.

OR

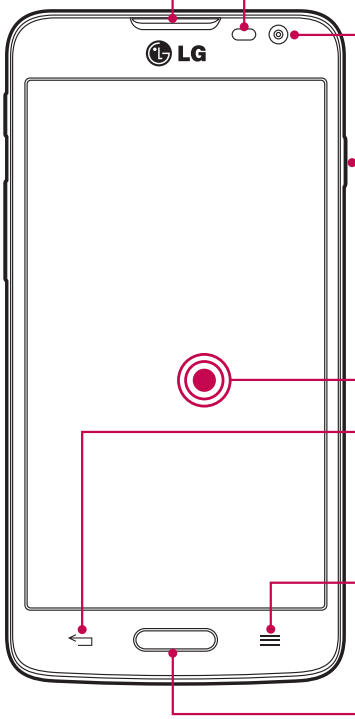
Press and hold the **Power/Lock Key** for 10 seconds to turn it off. If it still does not work, please contact the service center.

13. Do Not Connect Your Phone When You Power On/Off Your PC

Make sure to disconnect your phone from the PC when powering your PC on or off as it might result in PC errors.

Getting to know your phone

Phone overview



Earpiece

Proximity Sensor

Front-Facing Camera Lens

Use to take a picture of yourself or to video chat on supported applications.

Power/Lock Key

- Press and hold to power on and off, restart, enable and disable Airplane mode, or change the ringer type.
- Turns your screen on and off and locks it.

Touch screen

Back Key

- Returns to the previous screen.
- Closes pop-up menus and dialog boxes.

Menu Key

- Displays available options for the current screen or app.

Home Key

- Returns to the Home screen from any screen.
- Press and hold to view a list of the most recently used apps.

NOTE: Proximity sensor

When receiving and making calls, the proximity sensor automatically turns the backlight off and locks the touch screen by sensing when the phone is near your ear. This extends battery life and prevents you from unintentionally activating the touch screen during calls.

Warning! Placing a heavy object on the phone or sitting on it can damage the LCD and touch screen functions. Do not cover the LCD proximity sensor with protective film. This could cause the sensor to malfunction.

TIP!

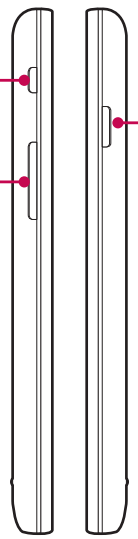
- Tap the **Menu Key** whenever you open an application to check what options are available.
- If your phone has errors when you use it or you cannot turn it on, remove the battery, install it again and turn it on after 5 seconds.

QuickButton Key (Customizable)

TIP: QuickButton Press for quick access to your favorite app.

Volume keys

- **On the Home screen:** Controls ringer volume
- **During a call:** Controls your earpiece volume
- **When playing a song:** Controls volume continuously



Power/Lock Key

Earphone Jack

Microphone

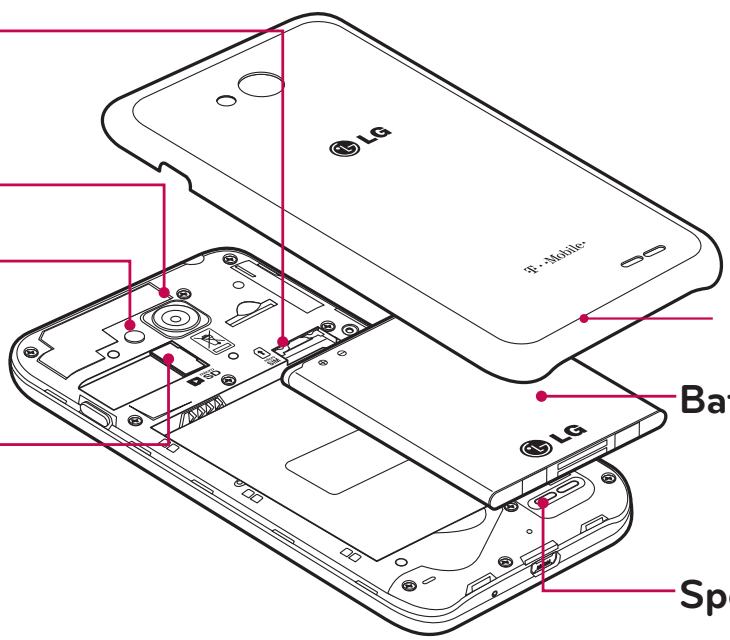
Charger/USB Port

IR LED

SIM card slot

Camera lens

Flash



Back cover

Battery

microSD Card slot

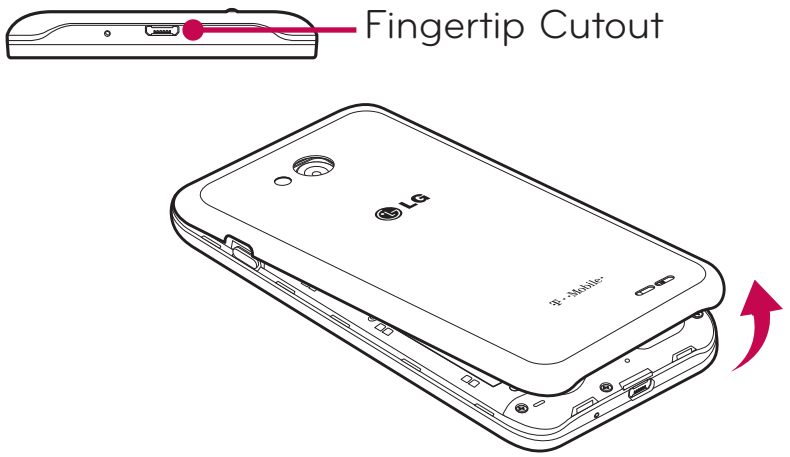
Speaker

Notice: The NFC antenna for this model is on the back cover.

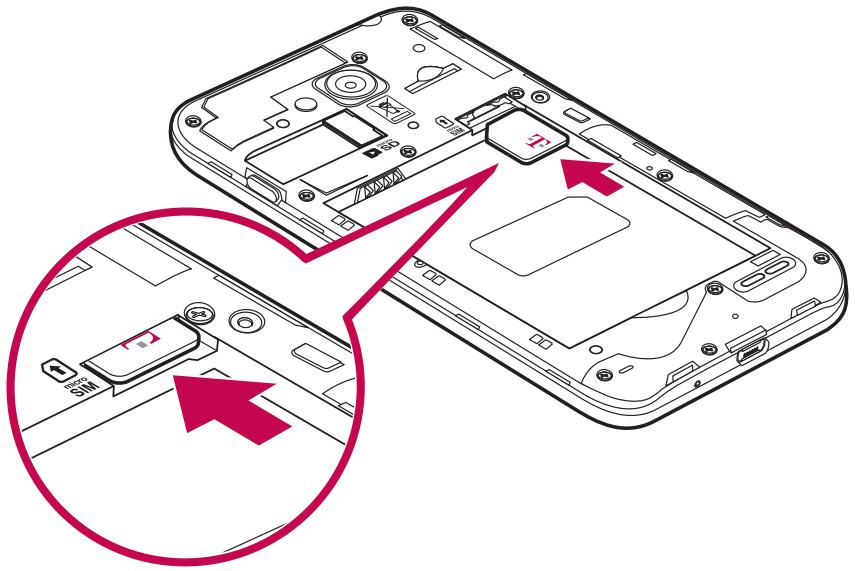
Installing the Micro SIM card and battery

Before you can start exploring your new phone, you'll need to set it up. To insert the Micro SIM card and battery:

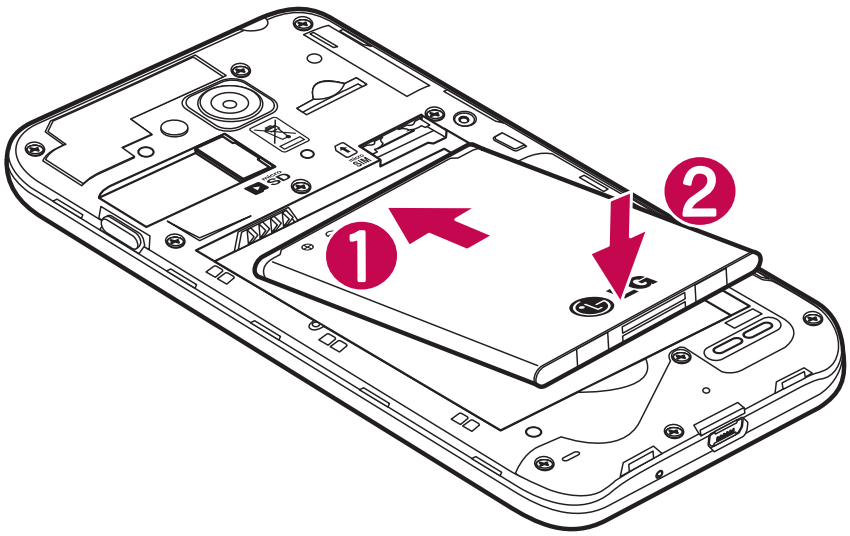
1 Hold the phone on your hand firmly. With the other hand, lift the back cover using the fingertip cutout located on the bottom of the cover and pull it up to remove it.



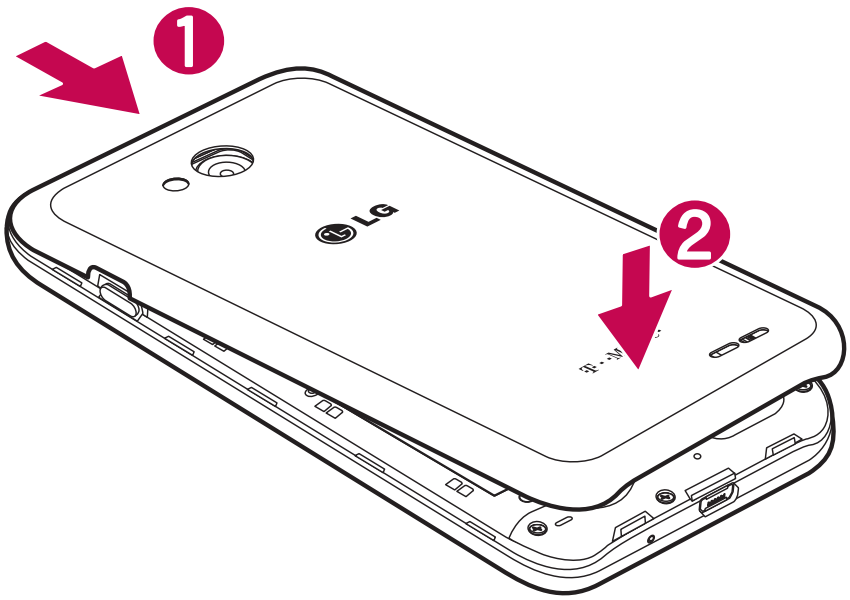
2 Slide the Micro SIM card into the Micro SIM card slot. Make sure the gold contact area on the card is facing downwards and the notched side is inserted first (see image below).



3 Insert the battery into place by aligning the gold contacts on the phone and the battery ❶ and press the battery down until it clicks into place ❷.

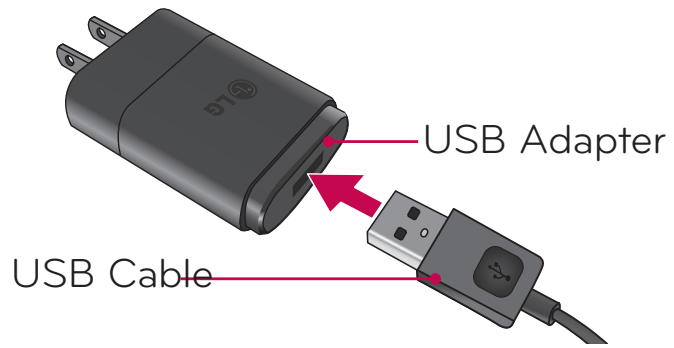


4 Align the back cover over the battery compartment ❶ and press it down until it clicks into place ❷.



Charging your phone

A rechargeable Li-ion battery is used to power your phone. A USB adapter, which is included with your phone, is used to charge the battery. Ask your local T-Mobile sales representative for further details regarding approved batteries and chargers. Before using your phone for the first time, make sure the battery is fully charged. An uncharged battery will fully recharge after 3 hours.

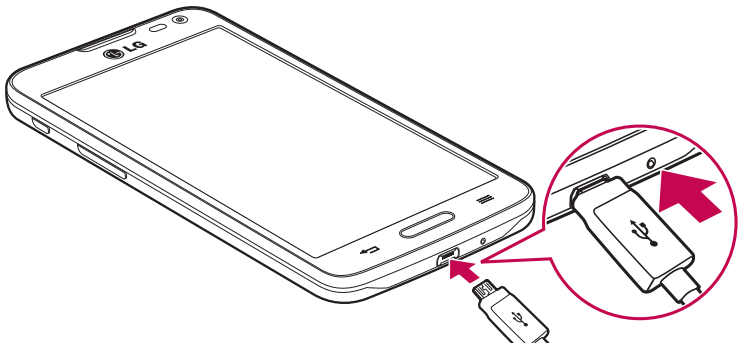


NOTE: Make sure the battery is installed before connecting the USB adapter. If the battery is not installed and the USB adapter is connected, the phone will not operate properly due to prolonged power cycling. Also, removing the battery with the USB adapter connected may damage the device. Please unplug USB adapter before removing battery.

Warning! If the touch screen does not function while the phone's in the process of charging, this may be due to an unstable power supply. If this occurs, disconnect the USB cable from the device or unplug the USB adapter from the power outlet.

1 Connect the USB adapter and USB cable.

2 Plug the USB cable (as shown below) into the phone's Charger/Accessory Port.



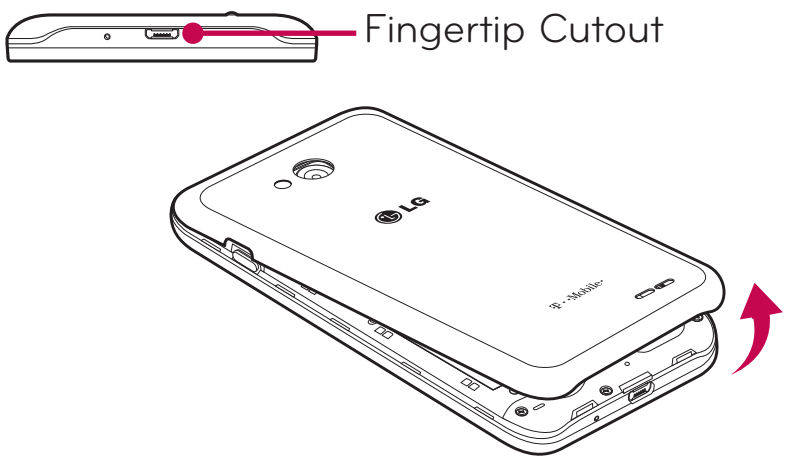
NOTE: The battery must be fully charged initially to improve battery lifetime.

Inserting a microSD card

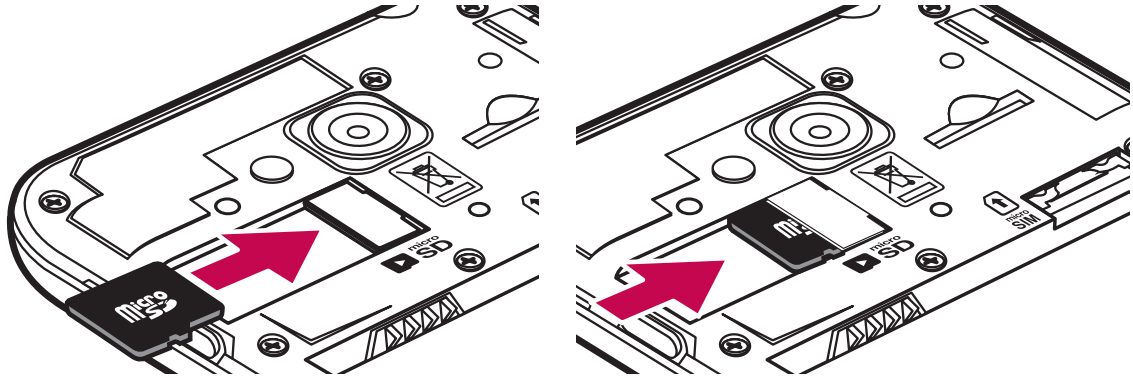
Insert a microSD™ card to use the camera and other multimedia features. Multimedia contents can be saved in the microSD card.

NOTE: This device supports up to a 32GB microSD card.

1 Remove the back cover.



2 Insert the microSD card into the slot. Make sure the gold contact area is facing downwards.



Removing the microSD card

To safely remove the microSD card from your phone, first you need to unmount it.

1 From the Home screen, tap **Apps** > **Settings** > **General** tab > **Storage** > **Unmount SD card**.

2 Remove the battery cover and battery, then gently pull the microSD card from the slot.

Warning! Do not remove the microSD card without unmounting it first. Otherwise, it may damage the microSD card as well as your phone, and the data stored on the microSD card may be corrupted.

Formatting the microSD card

Warning! All files stored on your microSD card are deleted when you format the card.

1 From the Home screen, tap **Apps** > **Settings** > **General** tab >**Storage**.

2 Tap **Erase SD card** (twice).

3 If you set an unlock pattern, enter it and tap **Erase everything**. The card will then be formatted and ready to use.

NOTE: If there is content on your microSD card, the folder structure may be different after formatting since all the files will have been deleted.

Locking and unlocking the screen

If you do not use the phone for a while, the screen will be automatically turned off and locked. This helps to prevent accidental touches and saves battery power.

When you are not using the your phone, press the **Power/Lock Key** to lock your phone.

If there are any programs running when you lock your screen, they may be still running in Lock mode. It is recommended that you exit all programs before entering Lock mode to avoid unnecessary charges (e.g. phone calls, web access and data communications).

To wake up your phone, press the **Power/Lock Key** . The Lock screen will appear. Touch and slide the Lock screen in any direction to unlock your Home screen. The last screen you viewed will open.

Your Home screen

Touch Screen tips

Here are some tips on how to navigate on your phone.

Tap or touch – A single finger tap selects items, links, shortcuts and letters on the on-screen keyboard.

Touch and hold – Touch and hold an item on the screen by touching it and not lifting your finger until an action occurs. For example, to open a contact's available options, touch and hold the contact in the Contacts list until the context menu opens.

Drag – Touch and hold an item for a moment and then, without lifting your finger, move your finger on the screen until you reach the target position. You can drag items on the Home screen to reposition them.

Swipe or slide – To swipe or slide, quickly move your finger across the surface of the screen, without pausing when you first touch it (so you don't drag an item instead). For example, you can slide the screen up or down to scroll through a list, or browse through the different Home screens by swiping from left to right (and vice versa).

Double-tap – Double-tap to zoom on a webpage or a map. For example, quickly double-tap a section of a webpage to adjust that section to fit the width of the screen. You can also double-tap to zoom in and out after taking a picture (using the Camera), and when using Maps.

Pinch-to-Zoom – Use your index finger and thumb in a pinching or spreading motion to zoom in or out when using the browser or Maps, or when browsing pictures.

Rotate the screen – From many applications and menus, the orientation of the screen adjusts to the device's physical orientation.

NOTE:

- To select an item, touch the center of the icon.
- Do not press too hard; the touch screen is sensitive enough to pick up a light, yet firm touch.
- Use the tip of your finger to touch the option you want. Be careful not to touch any other keys.

Home screen

Simply swipe your finger to the left or right to view the panels. You can customize each panel with apps, downloads, widgets and wallpapers.

NOTE: Some screen images may be different depending on your phone provider.

On your Home screen, you can view the Quick Keys icons at the bottom of the screen. These icons provide easy, one-touch access to the functions you use the most.

Touch the **Phone** icon to bring up the touch screen dialpad to make a call.

Touch the **Contacts** icon to open your contacts.

Touch the **Messaging** icon to access your messages and create a new message.

Touch the **Browser** icon to access to the internet.

Touch the **Apps** icon to display all of your installed applications. To open any application, simply touch the icon in the applications list.

NOTE: To add an icon, touch and hold the desired icon and drag it to the Quick Keys bar. Release it at the desired location. To remove an icon, touch and hold it, then drag it out of the Quick Keys bar.

Customizing the Home screen

You can customize your Home screen by adding apps, downloads, widgets or wallpapers. For more convenience using your phone, add your favorite apps and widgets to the Home screen.

To add items on your Home screen:

1. Touch and hold the empty part of the Home screen.
2. Tap the **Apps, Widgets** tab.
3. Drag the desired item to the desired location and lift your finger.

To remove an item from the Home screen:

Touch and hold the icon you want to remove, drag it to , and lift your finger.

TIP! To add an application icon to the Home screen from the Apps screen, touch and hold the application you want to add and drag it to the desired location.

TIP! Using folders

You can add several app icons in a folder. Drop one app icon over another one on a Home screen, and a folder will be created.

Returning to recently-used applications

1. Touch and hold the **Home Key** ⌂. The screen displays a pop-up containing the icons of applications you used recently.
2. Touch an icon to open the application. Or touch the **Back Key** ↩ to return to your previous screen.

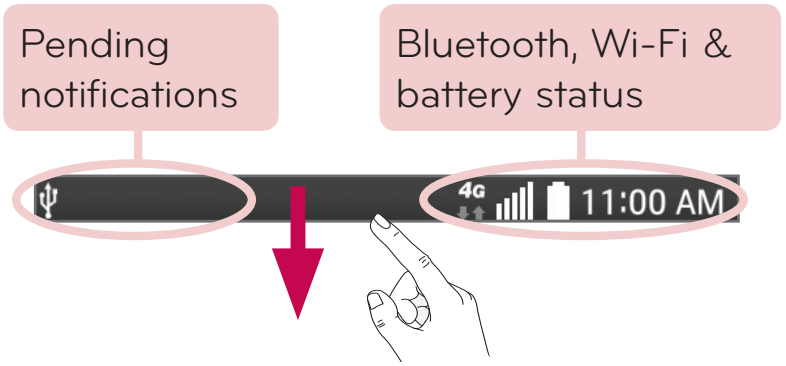
Notifications

Notifications alert you to the arrival of new messages, calendar events, and alarms, as well as to ongoing events, such as video downloads.

From the Notifications Panel, you can view your phone's current status and pending notifications.

When a notification arrives, its icon appears at the top of the screen. Icons for pending notifications appear on the left, and system icons showing things like Wi-Fi or battery strength on the right.

NOTE: The available options may vary depending on the region or service provider.



Accessing notifications

Swipe the Status Bar down to open the Notifications Panel. To close the Notifications Panel, swipe the bar that is at the bottom of the screen upwards.

Quick Settings

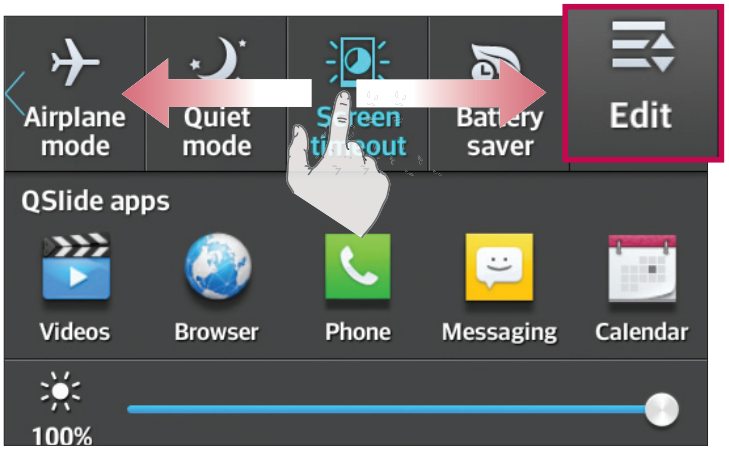
Use the Quick Settings to easily toggle function settings like Wi-Fi, manage display brightness and more. The Quick Settings are located at the top of the Notifications Panel.

NOTE: Touch and hold an icon from the Quick Settings to view the function's settings menu.

To rearrange Quick Setting items on the Notification Panel

Open the Notifications Panel, scroll the Quick Settings bar to the left, and touch . You can then view and rearrange the desired items on the Quick Settings menu. To set more items to be displayed on the Notifications Panel, touch .

Your Home screen



Notification icons on the Status Bar

Notification icons appear on the Status Bar at the top of the screen to report missed calls, new messages, calendar events, device status and more.

The icons listed in the table below are some of the most common ones.

Icon	Description
	No SIM card inserted
	No network signal available
	Airplane mode is on
	Connected to a Wi-Fi network
	Wired headset connected
	Call in progress
	Missed call

Icon	Description
	Ringer is silenced
	Vibrate mode is on
	Battery fully charged
	Battery is charging
	Phone is connected to PC via USB cable
	Downloading data
	Uploading data

	Bluetooth is on		GPS is on
	System warning		Data is synchronizing
	An alarm is set		New Gmail message available
	New voicemail available		New Hangouts message available
	New text or multimedia message		Choose input method
	A song is currently playing		Mobile hotspot is active

NOTE: The icons location in the Status Bar may differ according to the function or service.

On-screen keyboard

You can enter text using the on-screen keyboard. The on-screen keyboard appears automatically on the screen when you need to enter text. To manually display the keyboard, simply touch a text field where you want to enter text.

Using the keypad & entering text

Tap once to capitalize the next letter you type. Double-tap for all caps.

Tap to switch to the numbers and symbols keyboard.

Tap to enter a space.

Tap to create a new line.

Tap to delete the previous character.

Entering special characters

The on-screen keyboard allows you to enter special characters (e.g. "á").

For example, touch and hold the desired key (for example, the "a" key). After the desired character appears, slide your your finger over it and lift it off to enter it.

Google account setup

When you first turn on your phone, you have the opportunity to activate the network, to sign into your Google Account and select how you want to use certain Google services.

To set up your Google account:

- Sign into a Google Account from the prompted set-up screen.
  OR
- From the Home screen, tap **Apps** > **Settings** > **General** tab > **Accounts & sync** > **Add account** > **Google**.

If you have a Google account, touch **Existing**, enter your email address and password, then touch . Otherwise, touch **New** and enter the necessary information to create a new Google Account.

Once you have set up your Google account on your phone, your phone automatically synchronizes with your Google account on the Web.

Your contacts, Gmail messages, Calendar events and other information from these applications and services on the Web are synchronized with your phone. (This will depend on your synchronization settings.)

After signing in, you can use Gmail™ and take advantage of Google services on your phone.

Connecting to Networks and Devices

Wi-Fi

With Wi-Fi, you can use high-speed Internet access within the coverage of the wireless access point (AP). Enjoy wireless Internet using Wi-Fi, without extra charges.

Connecting to Wi-Fi networks

To use Wi-Fi on your phone, you need to access a wireless access point or 'hotspot'. Some access points are open and you can simply connect to them. Others are hidden or use security features; you must configure your phone to be able to connect to them. Turn off Wi-Fi when you're not using it to extend the life of your battery.

NOTE: If you are out of the Wi-Fi zone or have set Wi-Fi to **OFF**, additional charges may be applied by your mobile operator for mobile data use.

Turning Wi-Fi on and connecting to a Wi-Fi network

1. From the Home screen, tap **Apps** > **Settings** > **Networks** tab > **Wi-Fi.**
2. Tap OFF ON to turn Wi-Fi on and start scanning for available Wi-Fi networks.
3. Tap **Search** to see a list of active and in-range Wi-Fi networks.
   - Secured networks are indicated by a lock icon.
4. Touch a network to connect to it.
   - If the network is secured, you are prompted to enter a password or other credentials. (Ask your network administrator for details)
5. The Status Bar displays icons that indicate Wi-Fi status.

Bluetooth

Bluetooth is a short-range communications technology that allows you to connect wirelessly to a number of Bluetooth devices, such as headsets and hands-free car kits, and Bluetooth-enabled handhelds, computers, printers,

and wireless devices. The Bluetooth communication range is usually up to approximately 30 feet.

Turn on Bluetooth

From the Home screen, tap the **Menu Key** > **All settings** > **Networks** tab, then tap the **Bluetooth** switch OFF ON to turn on the Bluetooth functionality.

To make your phone visible to other devices

1. From the Home screen, tap the **Menu Key** > **All settings** > **Networks** tab > **Bluetooth**.
2. Make sure Bluetooth is turned on.
3. Tap the checkbox next to the device name. Visibility is set to 2 minutes by default.

NOTE: To change the visibility time length, tap the **Menu Key** > **Visibility timeout.** Choose from **2 minutes**, **5 minutes**, **1 hour**, or **Never time out**.

To scan other Bluetooth devices

1. Access the Bluetooth menu and make sure that it is on.
2. Tap **Search for devices.**

NOTE: To find other devices, place them in discoverable mode.

Pairing Bluetooth devices

1. Access the Bluetooth menu and make sure that it is on.
2. Tap **Search for devices**. Your device will display a list of discovered in-range Bluetooth devices.
3. Tap the device you want to pair from the list.
4. Tap **Pair** or Enter the passkey if needed, and tap **OK**.

NOTE: Pairing between two Bluetooth devices is a one-time process. Once a pairing has been created, the devices will continue to recognize their partnership and exchange information.

TIP! Please consult documentation included with Bluetooth device for information on pairing mode and passcode (typically 0 0 0 0 – four zeroes).

How to send data from your phone via Bluetooth

You can send data via Bluetooth by running a corresponding application, not from the Bluetooth menu.

- **Sending pictures**: Open the **Gallery** application and tap a picture. Then tap > **Bluetooth**. Check the devices if Bluetooth is turned on. Then tap the device you want to send data to from the list.
- **Sending contacts**: Open the Contacts application. Tap the contact you want to share, then tap the **Menu Key** > **Share** > **Bluetooth**. Check if Bluetooth is turned on and tap **Search for devices**. Then tap the device you want to send data to from the list.

TIP!

- The supported Bluetooth version is Bluetooth 4.0 and certified by Bluetooth SIG. It is compatible with other Bluetooth SIG certified devices.
- Due to different specifications and features of other Bluetooth-compatible devices, display and operations may be different, and functions such as transfer or exchange may not be possible with all Bluetooth compatible devices.
- Supported profiles are HFP/HSP, A2DP, AVRCP, OPP, FTP(Server), HID, MAP and PBAP.

To switch between a Bluetooth headset and the phone

When a Bluetooth headset is paired and connected to your phone, you can conduct calls on the headset for hands-free conversation. During a call, you can opt to use the Bluetooth headset or just the phone.

NOTE: Tap the Bluetooth button to switch the call from the phone to the Bluetooth device, or vice versa.

USB tethering

You can use your phone to provide a data connection to a computer by activating data tethering and connecting the phone and computer with a USB cable.

To tether your phone with your computer using the USB

1. Connect your phone to your computer with a USB cable.
2. From the Home screen, tap **Apps** > **Settings** > **Networks** tab > **Tethering & networks**.
3. Tap the **USB tethering** switch to turn it on.

NOTE:

- To use your phone's tethering capability, you must have the Smartphone Mobile Hotspot service added to your rate plan. Performance may vary depending on the number of devices connected and other factors.
- You cannot access your phone's microSD card on your computer when using USB tethering.

Smartphone Mobile Hotspots

You can also use your phone to provide a mobile broadband connection for up to 8 other devices. Create a hotspot and share your connection.

To create a portable hotspot, tap **Apps** > **Settings** > **Networks** tab > **Tethering & networks** > **Mobile HotSpot**. Then tap the checkbox next to **Mobile Hotspot** to turn the feature on. A checkmark indicates that the function is active. Tap **Configure Mobile HotSpot** and set a password upon first use.

Connecting to Networks and Devices

NOTE: To use your phone's Hotspot capability, you must have the Smartphone Mobile Hotspot service added to your rate plan. In addition, your Smartphone Mobile Hotspot service cannot be used at the same time as Wi-Fi. Please close your Wi-Fi connection prior to launching this service. Performance may vary depending on the number of devices connected and other factors. If you do not use a password, other unauthorized devices be able to use your Mobile Hotspot connection.

Calls

Making a call

1 From the Home screen, tap **Phone** to open the dial pad.
2 Enter the number on the keypad. To delete a digit, tap **Clear**.
3 Tap **Call** to make a call.
4 To end a call, tap **End**.

TIP! To enter "+" to make international calls, touch and hold 0 +.

Calling your contacts

1 From the Home screen, tap **Contacts** to open your contacts.
2 Scroll through the contact list or tap the **Search contacts** box and enter the first letter(s) of the contact you want to call. You can also tap a letter along the right side of the screen to access names starting with the chosen letter.
3 In the list that is displayed, tap the contact you want to call.
4 In the Contact Info screen, tap the phone number you wish to call.

Answering and rejecting a call

Locked screen

To answer an incoming call when the screen is locked, swipe **Answer** in any direction. Swipe **Decline** in any direction to decline an incoming call.

Unlocked screen

To answer an incoming call when the screen is unlocked, tap **Answer**. To decline the call, tap **Decline**.

TIP! Decline with message

You can send a message quickly using this function. This is useful if you need to reject a call with message during a meeting.

Adjusting the in-call volume

To adjust the in-call volume during a call, use the Volume Keys on the left side of the phone.

Making a second call

1. During your initial call, tap the **Menu Key** and select **Add call**.
2. Dial the number or search your contacts.
3. Tap **Call** to connect the call.
4. Both calls will be displayed on the call screen. Your initial call will be put on hold.
5. Tap the call entry on the screen to toggle between active calls or tap **Merge calls** to merge the calls.
6. To end active calls, tap **End**. If there is no active call, it will end the call on Hold.

Ending a Call

Tap **End** to end a call.

NOTE: To redial recent numbers, touch **Redial** at the end of the call or find the number within the **Call logs** and tap **Call** to the right of the entry.

If you exit the current call screen and return to the Home screen, you will be notified that you are still on an active call by the green phone icon within the Status Bar.

Ending a Call from the Status Bar

1 Touch and drag the Status Bar down to open the Notifications Panel.

2 Tap **End call** to end the currently active call.

Viewing your call logs

From the Home screen, tap **Phone**, then tap the **Call logs** tab. View a complete list of all dialed, received, and missed voice calls.

TIP! Tap any single call log entry to view the date, time, and duration of the call.

TIP! Tap the **Menu Key**, then tap **Clear** to delete entries individually or **Clear all** to delete all.

Call settings

You can configure phone call settings, such as call forwarding, and other special features offered by T-Mobile.

1 From the Home screen, tap **Apps** > **Settings** > **Networks** tab.

2 Tap **Call** and set any desired options.

Contacts

You can add contacts on your phone and synchronize them with the contacts in your Google Account or other accounts that support syncing contacts.

Searching for a contact

1. From the Home screen, tap **Contacts** to open your contacts.
2. Tap the **Search contacts** box and enter the contact name using the keypad. You can also tap a letter along the right side of the screen to access names starting with the chosen letter.

Adding a new contact

1. From the Home screen, tap **Phone** and enter the new contact's number.
2. Tap the **Menu Key** > **Add to Contacts** > **New contact**. Select the desired account (if applicable).
3. If you want to add a picture to the new contact, tap . Choose from **Take photo** to take a picture using the camera or **Select from Gallery**. Then browse for an image and select it.
4. Tap to enter more specific name information.
5. Enter the details about your contact.
6. Tap **Save** to save the contact entry.

Favorite Contacts

You can classify frequently called contacts as favorites.

To add a contact to your favorites

1. From the Home screen, tap **Contacts** to open your contacts.
2. Tap a contact to view its details.
3. Tap the star to the right of the contact's name. The star turns gold and the contact is added to your favorites.

To remove a contact from your favorites list

1 From the Home screen, tap **Contacts** to open your contacts.

2 Tap the **Favorites** tab to view your favorite contacts.

3 Tap a contact to view its details.

4 Tap the gold star to the right of the contact's name. The star turns grey and the contact is removed from your favorites.

Creating a group

1 From the Home screen, tap **Contacts** to open your contacts.

2 Tap the **Groups** tab, then tap the **Menu Key** and select **New group**.

3 Enter a name for the new group. You can also set a ringtone for the group.

4 Tap **Save** to save the group.

NOTE: If you delete a group, the contacts assigned to that group will not be lost. They will remain in your contacts.

Messaging

Your phone combines text and multimedia messages into one intuitive, easy-to-use menu.

Warning! The LG Messaging app should be set up as the default SMS app. If not, some message functions will be limited.

Conversation view

Messages exchanged with another party are displayed in chronological order and message threads so that you can conveniently see an overview of your conversations.

Sending a message

1. From the Home screen, tap **Messaging**, then tap **Compose** to create a new message.
2. Enter a contact name or phone number in the **To** field. As you enter the contact name, matching contacts appear. You can tap a suggested recipient. You can also add multiple contacts.
3. Tap the text field to start entering your message.
4. Tap the **Menu Key** to open the options menu. Choose from any of the available options.
5. Tap Send to send your message.

Warning! The 160-character limit may vary from country to country depending on how the text message is coded and the language used in the message.

Warning! If an image, video, or audio file is added to a text message, it will be automatically converted into a multimedia message and your service plan will be decremented accordingly.

NOTE: When you get a text message during a call, there will be an audible notification.

Using smilies

Liven up your messages using smilies.

When writing a new message, tap or tap the **Menu Key** > **Insert smiley**.

Changing your message settings

Your phone's message settings are predefined, so you can send messages immediately. You can change the settings based on your preferences.

- From the Home screen, tap **Messaging** > **Menu Key** > **Settings**.

Email

You can use the Email application to read emails from services like Gmail. The Email application supports the following account types: POP3, IMAP and Exchange.

Your service provider or system administrator can provide you with the account settings you need.

Managing an email account

The first time you open the Email application, a set-up wizard opens to help you to set up an email account.

After the initial setup, Email displays the contents of your inbox. If you have added more than one account, you can switch among accounts.

To add another email account:

- Press > > **Apps** tab > **E-mail** > tap > **Settings** > **Add account.**

To change an email account's settings:

- Press > > **Apps** tab > **E-mail** > tap > **Settings** > **General settings**.

To delete an email account:

- Press > > **Apps** tab > **E-mail** > tap > **Settings** > tap > **Remove account** > Select the account to delete > **Remove** > select **Yes.**

Working with account folders

Open the **Email** application and tap the **Menu Key** and select **Folders**. Each account has an Inbox, Outbox, Sent and Drafts folder. Depending on the features supported by your account's service provider, you may have additional folders.

Composing and sending email

To compose and send a message

1. While in the Email application, tap **Write** .
2. Enter an address for the message's intended recipient. As you enter text, matching addresses will be proposed from your Contacts. Separate multiple addresses using semicolons.
3. Tap **Menu Key** to add a Cc/Bcc and tap **Attach** to attach files, if required.
4. Enter the subject and your message
5. Tap the **Send** to send the message.

TIP! When a new email arrives in your Inbox, you will be notified by a sound or vibration. Tap the email notification to stop receiving notifications.

Camera

To open the Camera application, tap **Camera** on the Home screen.

Getting to know the viewfinder

1. **Flash** – Choose from **Off**, **On**, **Auto**.
2. **Swap camera** – Switch between the rear–facing camera lens and the front–facing camera lens.
3. **Shot mode** – Choose from **Normal, Panorama**, **Continuous shot**, **Time catch shot** or **Sports**.
4. **Settings** – Tap this icon to open the settings menu.
5. **Video mode** – Tap and slide down this icon to switch to video mode.
6. **Capture button**
7. **Gallery** – Tap to view the last photo you captured. This enables you to access your gallery and view saved photos while in camera mode.

NOTE: Please ensure the camera lens is clean before taking pictures.

Using the advanced settings

In the viewfinder, tap to open the advanced options. You can change the camera settings by scrolling through the list. After selecting the option, tap the **Back Key**.

	To take a photo, say one of the following words: Cheese, Smile, Whisky, Kimchi or LG.
	Defines and controls the amount of sunlight entering the photo.
	Tap to select the focus mode.
W3M	Selects photo resolution. If you choose high resolution, file size will increase, which means you will be able to store fewer photos in the memory.
	The ISO rating determines the sensitivity of the camera's light sensor. The higher the ISO, the more sensitive the camera. This is useful in darker conditions when you cannot use the flash.
AWB	Improves color quality in various lighting conditions.
	Applies artistic effects to your pictures.
	Sets a delay after the capture button is pressed. This is ideal if you want to be in the photo.
	Activate this to use your phone's location-based services. **NOTE:** This function is available when the GPS function is active or connected network.
	Selects a shutter sound.
	Set the Volume Key whether to use for the capture or zoom.
	Select storage to save images.
	Opens the help guide to know how a function operates.

	Restores all camera default settings.

TIP!

- When you exit the camera, some settings return to their defaults, such as white balance, color effect, timer and scene mode. Check these before you take your next photo.
- The setting menu is superimposed over the viewfinder, so when you change photo color or quality elements, you will see a preview of the changed image behind the Settings menu.

Taking a quick photo

1. Open the **Camera** application and point the lens toward the subject your want to photograph.
2. Focus boxes will appear in the center of the viewfinder screen. You can also tap anywhere on the screen to focus on that spot.
3. When the focus box turns green, the camera has focused on your subject.
4. Tap to capture the photo.

Using Time catch shot mode

Sets the camera to capture missing moments by taking five sequential pictures before is tapped.

1. Open the **Camera** application.
2. Tap MODE > **Time catch shot**.
3. Tap to take a picture.
4. To view the moments just before the picture was taken, tap the image thumbnail at the bottom of the Camera screen.

5 Select the pictures that you want to keep, then tap at the top of the screen.

Once you've taken a photo

Touch the image preview in the bottom right corner of the screen to view the last photo you took. The following options are available:

	Touch to take another photo immediately.
	Touch to share your photo with others using any of the available methods.
	Touch to delete the photo.

TIP! If you have a social networking account and set it up on your phone, you can share your photo with your social networking community.

NOTE: Additional charges may apply when MMS messages are downloaded while roaming.

Touch the **Menu Key** to open all advanced options.

Set image as – Touch to use the photo as a **Contact photo, Home screen wallpaper** or **Lock screen wallpaper**.

Move – Touch to move the photo to another place.

Copy – Touch to copy the selected photo and save it to another album.

Rename – Touch to edit the name of the selected photo.

Rotate left/right – To rotate left or right.

Crop – Crop your photo. Move your finger across the screen to select the area to be cropped.

Edit – View and edit the photo.

Slideshow – Automatically shows you the images in the current folder one after the other.

Add location – To add the location information.

Details – Find out more information about the contents.

Viewing your saved photos

You can access your saved photos when in camera mode. Just tap the image preview in the bottom of the screen and your Gallery will be displayed.

- To view more photos, scroll left or right.
- To zoom in or out, double-tap the screen or place two fingers and spread them apart (move your fingers closer together to zoom out).

Camcorder

To open the Camcorder application, tap **Apps** > **Camera** > Camcorder mode.

Getting to know the viewfinder

1. **Flash** – Choose from **Off**, **On**, **Auto**.
2. **Swap camera** – Switch between the rear-facing camera lens and the front-facing camera lens.
3. **Recording mode** – Choose from **Normal** or **Live effect.**
4. **Settings** – Tap this icon to open the settings menu.
5. **Camera mode** – Tap and slide up this icon to switch to camera mode.
6. **Start recording**
7. **Gallery** – Tap to view the last video you recorded. This enables you to access your gallery and view your saved videos while in video mode.

TIP! When recording a video, place two fingers on the screen and pinch to use the Zoom function.

Using the advanced settings

Using the viewfinder, touch to open all the advanced options.

	Tap to set the size (in pixels) of the video you are recording.
	Defines and controls of the amount of sunlight entering the lens. Slide the brightness indicator along the bar towards "-" for a lower brightness video or towards "+" for a higher brightness video.
	Improves color quality in various lighting conditions.
	Choose a colour tone to use for your new view.
	Activate this to use your phone's location-based services. **NOTE:** This function is available when the GPS function is active or connected network.
	Set the Volume Key whether to use for the record or zoom.
	Select storage to save videos.
	Opens the help guide to know how a function operates.
	Restores all camera default settings.

Recording a quick video

1. Open the **Camera** application and slide the **Video mode** button.
2. The video camera viewfinder appears on the screen.
3. Holding the phone, point the lens towards the subject you wish to capture in your video.
4. Tap once to start recording.
5. A red light will appear at the top left corner of the viewfinder with a timer

showing the length of the video.

6 Tap on the screen to stop recording.

TIP!

– Tap to capture image during recording a video.

– Tap to pause during recording a video.

After recording a video

Touch the image preview in the bottom right corner of the screen to view the video. The following options are available:

	Touch to record another video immediately.
	Touch to share your video with others using any of the available methods.
	Touch to delete the video.

Watching your saved videos

1 In the viewfinder, touch the image preview in the bottom of the screen.

2 Your Gallery will appear on the screen.

3 Tap a video to play it automatically.

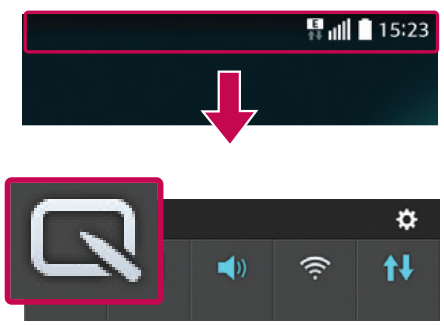
Adjusting the volume when viewing a video

To adjust the volume of a video while it is playing, use the Volume Keys on the left side of the phone.

QuickMemo

The **QuickMemo** feature allows you to create memos and capture screen shots. Capture screens, draw on them, and share them with family and friends with QuickMemo.

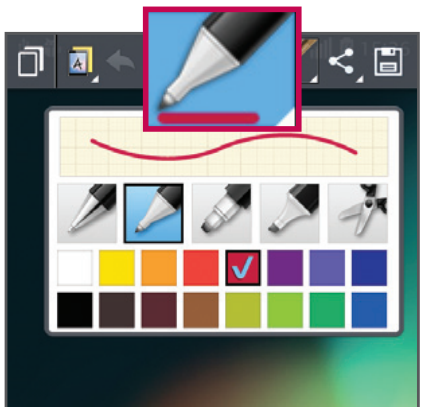
OR



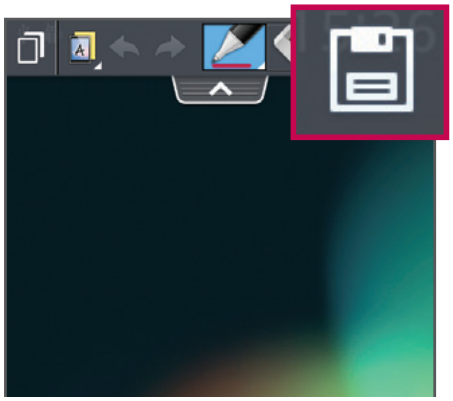
1 Enter the QuickMemo screen by pressing **QuickButton Key** for one second on the screen you want to capture.

OR

Touch and slide the status bar downward and tap .



2 Select the desired menu option from **Pen type**, **Colour**, **Eraser** and create a memo.



3 Tap in the Edit menu to save the memo with the current screen. To exit QuickMemo at any time, tap .

NOTE: Please use a fingertip while using the QuickMemo. Do not use your fingernail.

NOTE: You can also access **QuickMemo** by quickly pressing the QuickButton Key. (When default app is **QuickMemo**.)

Using the QuickMemo options

The following options are available when using QuickMemo.

	Touch to keep the current memo on the screen and use the phone features simultaneously.
	Selects whether to use the current image or a note image as your background.
	Allows you to undo and redo previous actions.
	Selects the pen type and the color.
	Erases the memo that you created.
	Touch to share your memo with others using any of the available methods.
	Saves the memo in the Gallery.

Viewing the saved QuickMemo

From the Home screen, tap **Apps** > **Gallery** and select the **QuickMemo** album.

QSlide

From any screen, bring up a notepad, calendar, and more as a window inside your screen.

1		Tap to exit the QSlide and return to full window.
2		Tap to adjust transparency.
3		Tap to end the QSlide.
4		Tap to adjust the size.

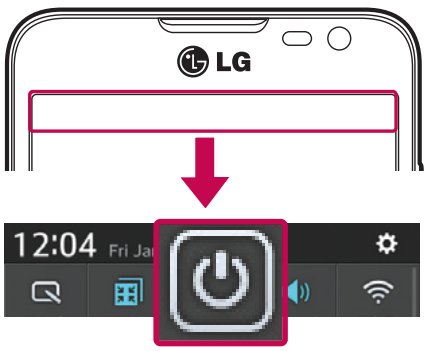
1 Touch and slide the status bar downwards > tap QSlide apps or while using applications that support QSlide, tap . The function will be continuously displayed as a small window on your screen.

2 You can make a call, browse the Web, or choose other phone options. You can also use and tap the screen under the small windows when the transparency bar is not full .

NOTE: The QSlide can support up to two windows at the same time.

QuickRemote

QuickRemote turns your phone into a Universal Remote for your home TV and Cable box.



1 Touch and slide the status bar downwards and tap > **ADD REMOTE.**

OR

Tap > > **Apps** tab > **QuickRemote** > tap .

2 Select the type and brand of device, then follow the on-screen instructions to configure the device(s).

3 Touch and slide the status bar downwards and use QuickRemote functions.

Functions

Tap the **Menu key** to select **Magic Remote setting, Edit remote name, Move remote, Delete remote, Edit room, Settings** and **Help.**

NOTE: The QuickRemote operates the same way as an ordinary remote control infrared (IR) signals. Be careful not to cover the infrared sensor at the top of the phone when you use the QuickRemote function. This function may not be supported depending on the model, the manufacturer or service company.

Using QuickRemote

1 From the Home screen, tap the **Apps** > **QuickRemote** to open a QuickRemote bar with all of the remotes you set up.

2 Select the remote you want by tapping its type/name at the top of the QuickRemote bar.

3 Tap the buttons on the displayed remote.

NOTE: When adding remote control of TV, QuickRemote could use the INPUT button to configure the appropriate remote control. When configuring the INPUT button, the input source of the TV could change. To reset the input source of your TV, tap the INPUT button on QuickRemote several times(depending on number of devices connected on TV) until you reach the desired option.

QuickRemote options

To access the QuickRemote Options menu, tap the **Menu Key** to select the desired option.

NOTE:

- QuickRemote cannot be used during a call or when connected to a Bluetooth device or Ear-mic.
- While playing music in the background, pressing any QuickRemote button will mute the sound for a second.

Multimedia

Gallery

You can store multimedia files in internal or external memory for easy access to all your multimedia files. Use this application to view multimedia files like pictures and videos.

From the Home screen, tap **Apps** > **Gallery** .
You can manage and share all your image and video files with the Gallery.

NOTE:

- Some file formats are not supported, depending on the software installed on the device.
- Some files may not play properly, depending on how they are encoded.

Viewing pictures

Launching Gallery displays your available folders. When another application, such as Email, saves a picture, the download folder is automatically created to contain the picture. Likewise, capturing a screenshot automatically creates the Screenshots folder. Tap a folder to open it.

Pictures are displayed by creation date in a folder. Select a picture to view it full screen. Scroll left or right to view the next or previous image.

Zooming in and out

Use one of the following methods to zoom in on an image:

- Double-tap anywhere to zoom in. Double-tap again to return to fullscreen view.
- Spread two fingers apart on any place to zoom in. Pinch in to zoom out.

Playing videos

Video files show the icon in the preview. Select a video and tap to play it.

Viewing photo options

When viewing a photo, tap the **Menu Key** and use the advanced editing options.

Deleting images and videos

Use one of the following methods:

- In a folder, tap and select the photos and videos you want to delete, then tap **Delete**.
- When viewing a photo or video, tap .

Setting as wallpaper

When viewing a photo, touch the **Menu Key** > **Set image as** to set the image as wallpaper or assign to a contact.

NOTE:

- Some file formats are not supported, depending on the device software.
- If the file size exceeds the available memory, an error can occur when you open files.

Videos

Your phone has a video player that lets you play all of your favorite videos. To access the video player, from the Home screen tap **Apps** > **Videos** .

Playing a video

1 From the Home screen, tap **Apps** > **Videos** .

2 Select the video you want to play.

/	Touch to pause/resume video playback.
	Touch to go 10 seconds forward.
	Touch to go 10 seconds backward.
	Touch to manage the video volume.
/ /	Touch to change the ratio of the video screen.
	Tap to capture image during playing a video.
	Touch to use QSlide.
/	Touch to lock/unlock a video screen.

To change the volume while watching a video, press the Volume Keys on the left side of the phone.

Touch and hold a video in the list to access the following options: **Share**, **Trim**, **Delete** and **Details**.

Music

Your phone has a music player that lets you play all your favorite tracks. To access the music player, from the Home screen, tap **Apps** > **Music** .

Add music files to your phone

Start by transferring music files to your phone:

- Transfer music using Media sync (MTP).
- Download from the wireless Web.

Transfer music using Media sync (MTP)

1. Connect the phone to your PC using the USB cable.
2. Select the **Media sync (MTP)** option. Your phone will appear as another hard drive on your computer. Click on the drive to view it. Copy the files from your PC to the drive folder.

3 When you're finished transferring files, swipe the Status Bar down and touch **USB connected** > **Charge only**. You may now safely unplug your device.

Playing a song

1 From the Home screen, tap **Apps** > **Music** .

2 Touch the **Songs** tab.

3 Select the song you want to play.

/	Tap to pause/ resume playback.
	Tap to skip to the next track in the album, playlist, or shuffle. Touch and hold to fast forward.
	Tap to restart the current track or skip to the previous track in the album, playlist, or shuffle. Touch and hold to rewind.
	Tap to display the Volume slider bar, then adjust the playback volume on the slider bar.
	Tap to set audio effects.
YouTube	Tap to find the files with YouTube.
	Tap to open the current playlist.
	Tap to add the song to your favourites.
	Tap to play the current playlist in shuffle mode (tracks are played in random order).
	Tap to toggle through the repeat modes to repeat all songs, repeat current song, or repeat off.

To change the volume while listening to music, press the Volume Keys on the left side of the phone.

Touch and hold any song in the list to access the following options: **Play**, **Add to playlist**, **Share, Set as ringtone, Delete, Details** and **Search**.

NOTE:

- Some file formats are not supported, depending on the device software.
- If the file size exceeds the available memory, an error can occur when you open files.

NOTE: Music file copyrights may be protected by international treaties and national copyright laws.

Therefore, it may be necessary to obtain permission or a licence to reproduce or copy music.

In some countries, national laws prohibit private copying of copyrighted material. Before downloading or copying the file, check the national laws of the relevant country concerning the use of such material.

Utilities

Guest Mode

To protect your privacy or limit some applications to your children, you can use the Guest mode.

When you lend your phone to others, you can limit the applications to be displayed.

In advance, set the Guest mode and customize the options.

NOTE: To use the Guest mode, the pattern lock should be set in advance.

1 Press > > **Apps** tab > **Settings** > **General** tab > **Guest mode**.

2 Tap the Guest Mode switch to enable this mode.

Setting your alarm

1 From the Home screen, tap **Apps** > **Alarm/Clock** > **New alarm** .

2 Set the desired alarm time.

3 Set **Repeat**, **Snooze duration**, **Vibration**, **Alarm sound, Alarm volume, Auto app starter, Puzzle lock** and **Memo**.

4 Touch **Save**.

NOTE: To change alarm settings in the alarm list screen, touch the **Menu Key** and select **Settings**.

Using your calculator

1 From the Home screen, tap **Apps** > **Calculator** .

2 Touch the number keys to enter numbers.

3 For simple calculations, touch the function you want to perform (, , or) followed by .

4 For more complex calculations, touch the **Menu Key** , select the **Scientific**

calculator, then choose sin, cos, tan, log etc.

5 To view the calculation history, touch the **Menu Key** and select the Calculation history.

Adding an event to your calendar

1 From the Home screen, tap **Apps** > **Calendar** .

2 On the screen, you can find the different view types for the Calendar (Day, Week, Month, Year, Agenda).

3 Tap on the date for which you wish to add an event and tap .

4 Touch the **Event name** field and enter the event name.

5 Touch the **Location** field and enter the location. Check the date and enter the time you wish your event to start and finish.

6 If you wish to add a note to your event, touch the **Description** field and enter the details.

7 If you wish to repeat the alarm, set **REPEAT** and set **REMINDERS**, if necessary.

8 Touch **Save** to save the event in the calendar.

Lookout Security

Lookout™ offers you mobile device security features that have little effect on your phone's overall performance. Lookout Mobile Security gives you key security options that are special to the mobile market. In addition to antivirus and anti-malware technology, there is also a lost and stolen phone locator service, an application privacy adviser, and a backup service.

1 From the Home screen, tap **Apps** > **Lookout Security** .

2 Read the on-screen descriptions and tap **Activate Lookout** to begin the configuration process.

3 Read the on-screen Security information and if needed, tap the **Enable Security** box to activate this feature.

4 Tap **Next**.

5 Read the on-screen information about Backup and if desired, tap the **Enable Backup** box to activate the feature.

6 Tap **Next**.

7 Read the Mobile Threat Network information and if desired, tap the **Enable the Mobile Threat Network** box to enable this feature.

8 Tap **Next**.

9 Read the on-screen information about the feature that can aid in locating your missing phone and if needed, tap **New user** (to setup a new account) or **Existing user** (to log into your account field to activate the feature).

10 Tap **Start Lookout**.

From the main application, the features are shown as buttons. Touch one to show a button that will run the feature.

T-Mobile TV

This application lets you watch live TV and Video on Demand on your phone.

1 From the Home screen, tap **Apps** > **T-Mobile TV**. The T-Mobile Terms and Conditions page will be shown.

2 Tap **Accept** if you accept the Terms and Conditions.
OR
Tap **Exit** to close the application.

3 Tap any of the available categories to begin viewing.

NOTE: T-Mobile TV must be configured over network before first use. 30-days free offer is available for a limited time and subject to change. Unsubscribe during the first 30 days to avoid any charges; access to free content will remain available. See T-Mobile TV app for details. Qualifying data plan and/or Wi-Fi connection required.

T-Mobile Name ID

Lets you modify the on-screen Caller ID information. Name ID identifies unknown callers by Name, City, and State.

1 From the Home screen, tap **Apps** > **T-Mobile Name ID** .

2 Choose an on-screen option.

Visual Voicemail

The **Visual Voicemail** application allows users to view a list of people who left voicemail messages on your phone. You can listen to your message without being limited by the date.

1 From the Home screen, tap **Apps** > **Visual Voicemail** .

2 A list of the voicemail messages will be displayed.

Important! If this is the first time accessing Visual Voicemail, you may be prompted to enter a new PIN code and touch **Next** to activate Visual Voicemail.

NOTE: To use your phone's Visual Voicemail capability, you must have the Visual Voicemail service added to your rate plan.

3 Tap an on-screen voicemail message to play it back.

Voice Recorder

Use the voice recorder to record voice memos or other audio files.

Recording a sound or voice

1 From the Home screen, tap **Apps** > **Voice Recorder** .

2 Touch to begin recording.

3 Touch to end the recording.

4 Touch to listen to the recording.

NOTE: Touch to access your list of recordings. You can listen to the saved recordings. The available recording time may differ from actual recording time.

Sending the voice recording

1 Once you have finished recording, you can send the audio clip by touching .

2 Choose from any of the available methods for sharing.

ThinkFree Viewer

ThinkFree Viewer is a professional mobile office solution that lets users conveniently view various types of office documents, including Word, Excel and PowerPoint files, anywhere or anytime, using their mobile devices.

Press > > **Apps** tab > **ThinkFree Viewer.**

Viewing files

Mobile users can now easily view a wide variety of file types, including Microsoft Office documents and Adobe PDF, right on their mobile devices. When viewing documents using ThinkFree Viewer, the objects and layout remain the similar in the original documents.

LG Backup

About backing up and restoring smartphone data

It is recommended that you regularly create and save a backup file of your data, especially before updating any software. Maintaining a current backup file may allow you to recover smartphone data if your smartphone is lost, stolen, or corrupted by an unforeseen issue.

This LG Backup application is supported between LG smartphones, other software or operating system versions. As a result, when you buy the new LG smartphone, you can restore the current phone data to your new phone.

If you have the Backup application preloaded on your smartphone, you can backup

and restore most of your smart phone data, including downloaded and pre-installed applications, LG Home screen, personal data and system settings. You may also:

- Perform a manual LG Backup of your smartphone data.
- Schedule automatic backups of your smartphone data.
- Restore your smartphone data.

NOTE: Please note that the Backup function does not support the backup of User data & Media data (Picture/Video/Music). Please backup those files using the Media sync (MTP). Connect your phone to your computer using a USB cable and touch Media sync (MTP).

Warning! To protect against unexpected shutoff during backup or restore operations, due to insufficient battery power, you should always keep your battery fully charged.

LG Backup your smart phone data

1 From the Home screen, tap **Apps** > **LG Backup** > **Backup**.

2 Select the check box you want to backup, tap **Next**.

3 Select the desired location and tap **Next** > **Srart**.

NOTE: Checkmark to use the lock when creating backup file.

4 When all selected files have been backed up, you will see the message **Backup complete.**

Scheduling automatic backups

You can also program automatic backups for the data on your smartphone according to your schedule setting. To do this, complete the following steps:

1 From the Home screen, tap **Apps** > **LG Backup** > **Scheduled backup**.

2 Select the desired option, Set the **Backup Location**, **Backup items**, **Backup time**, **scheduled backup files**.

NOTE: Checkmark to use the lock when creating backup file. Tap the Scheduled backup switch[switch icon] to toggle between On and Off.

Restoring smartphone data

NOTE: All files that are stored on your smart phone are deleted before the backup file is restored.

1. From the Home screen, tap **Apps** > **LG Backup** > **File restore & management**.
2. On the Restore screen, select a backup file that contains the data you wish to restore.
3. Select the check box next to the item you wish to restore and select **Restore** to restore it to your phone.

NOTE: Please note that your phone data will be overwritten with the content of your backup.

4. If the backup file is encrypted, type the password that you created to encrypt it.
5. When all selected files have been restored, the phone will automatically restart.

NOTE: You can set the **Lock** option when creating backups to encrypt your backup files for extra protection.

From the Backup home screen, tap the **Menu Key** > **Set password**. And enter a password and hint in case you forgot your password. Once you have set up a password, you need to enter it every time you want to do backup/restore.

Google+

Use this application to stay connected with people via Google's social network service.

From the Home screen, tap **Apps** > **Google+** .

NOTE: This application may not be available depending on the region or service provider.

Voice Search

Use this application to search web pages using voice.

1 From the Home screen, tap **Apps** > **Voice Search** .

2 Say a keyword or phrase when **Speak now** appears on the screen. Select one of the suggested keywords that appear.

NOTE: This application may not be available depending on the region or service provider.

Downloads

Use this application to see what files have been downloaded.

From the Home screen, tap **Apps** > **Downloads** .

The Web

Browser

Use this application to browse the Internet. The browser gives you a fast, full-color world of games, music, news, sports, entertainment and much more, right on your mobile phone wherever you are and whatever you enjoy.

NOTE: Additional charges apply when connecting to these services and downloading content. Check data charges with your network provider.

From the Home screen, tap **Apps** > **Browser** .

Using the Web toolbar

The following options are available.

	Touch to go back one page.
	Touch to go forward one page, to the page you connected to after the current one. This is the opposite of what happens when you touch the **Back Key** , which takes you to the previous page.
	Touch to go to the Home page.
	Touch to add a new window.
	Touch to access bookmarks.

Viewing webpages

Tap the web address field, enter the web address and tap Go.

Opening a page

- To go to new page, tap > .
- To go to another webpage, tap , scroll up or down, and tap the page to view it.

Searching the web by voice

Tap the web address field, tap , speak a keyword, and then select one of the suggested keywords that appear.

NOTE: This feature may not be available depending on the region or service provider.

Bookmarks

- To bookmark the current webpage, tap the **Menu Key** > **Add to bookmarks**. Enter the desired information and tap **OK**.
- To open a bookmarked webpage, tap on the Browser toolbar and select one.

History

Tap > **History** tab to open a webpage from the list of recently-visited webpages. To clear the history, tap the **Menu Key** > **Clear all history**.

Chrome

Use Chrome to search for information and browse webpages.
From the Home screen, tap **Apps** > **Chrome** .

NOTE: This application may not be available, depending on your region and service provider.

Viewing webpages

Tap the web address field, and then enter a web address or search criteria and tap Go on the keyboard.

Opening a page

- To go to a new page, tap > **New tab** .
- To go to another webpage, tap , scroll up or down and tap the page to

select it.

Searching the web by voice

Tap the address field, tap , speak a keyword and select one of the suggested keywords that appear.

Syncing with other devices

Sync open tabs and bookmarks to use with Chrome on another device when you are logged in with the same Google account.

To view open tabs on other devices, tap the **Menu Key** > **Other devices**. You must be signed in to the same Google account on all devices. Select a webpage to open.

Adding bookmarks

To add bookmarks, tap the **Menu Key** > .

Settings

Access the Settings menu

1 From the Home screen, tap **Apps** > **Settings** .
OR
From the Home screen, tap the **Menu Key** > **System settings**.

2 Select a setting category and select an option.

Networks

< Airplane mode >

Tap the **Airplane mode** switch to toggle between On and Off. Activating Airplane mode disables all wireless connections.

< Wi-Fi >

Tap to turn on Wi-Fi to connect and available Wi-Fi networks.

TIP! How to obtain the MAC address

To set up a connection in some wireless networks with MAC filters, you may need to enter the MAC address of your phone in the router.

You can find the MAC address in the following user interface: From the Home screen, tap **Apps** > **Settings** > **Wi-Fi** > **Menu Key** > **Advanced** > **MAC address**.

< Bluetooth >

Turn the Bluetooth wireless feature on or off and connect with other Bluetooth-enabled devices.

< Mobile data >

Displays the data usage and set mobile data usage limit.

< Call >

Configure phone call settings such as call forwarding and other special features offered by your carrier.

Voicemail – Allows you to select your carrier's voicemail service.

Fixed dialing numbers – Turn on and compile a list of numbers that can be called from your phone. You'll need your PIN2, which is available from your operator. Only numbers within the fixed dial list can be called from your phone.

Wi-Fi Calling

Important!

Wi-Fi Calling requires that you use the SIM card that is shipped with your phone. Also, you must register your address for 9-1-1. Wi-Fi Calling will not work until you have registered for 9-1-1 by logging into your account at **www.T-Mobile.com**. Go to your profile and click **Customer Info** and continue on to enter your address.

About Wi-Fi Calling

Wi-Fi Calling can improve your coverage and allows you to make phone calls and send messages over a Wi-Fi network (when a Wi-Fi network is available). Unless your rate plan provides otherwise, Wi-Fi Calling minutes count the same as T-Mobile cellular calling minutes on your phone bill.

- To use Wi-Fi Calling, you must first turn on Wi-Fi, connect to a Wi-Fi network, and then turn on Wi-Fi Calling.
- When the Wi-Fi Calling feature is on, your phone displays the **Wi-Fi Calling** icon on the Status Bar.
- To stay on a Wi-Fi call, you must remain within range of the Wi-Fi network. Your call will drop as you leave the Wi-Fi range. When your Wi-Fi signal weakens, your phone will beep and display a warning message alerting you that your call will drop if the signal gets weaker.

Wi-Fi Calling offers three connection options:

- **Wi-Fi preferred:** All calls are made over an available Wi-Fi network. If there are no available Wi-Fi networks calls are made over the cellular network.
- **Cellular network preferred:** All calls are made over the cellular network unless the cellular network is not available, then calls are made over an available Wi-Fi network.

- **Never use Cellular Network:** All calls are made over an available Wi-Fi network. If there are no available Wi-Fi networks, your calls will not connect.

Incoming call popup - Display incoming call popup when using camera and videos.

Call reject – Allows you to set the call reject function. Choose from **Call reject mode** or **Rejection list**.

Decline with message – When you want to reject a call, you can send a quick message using this function. This is useful if you need to reject a call during a meeting.

Privacy keeper – Hides the caller name and number for an incoming call.

Home button answers call - checkmark enables home button answers call function.

Call forwarding – Choose whether to divert all calls when the line is busy, when there is no answer or when you have no signal.

Auto answer - Turn on auto answer with handsfree.

Connection vibration – Vibrates your phone when the other party answers the call.

TTY mode – Opens a dialog box to set TTY mode to communicate with other TTY devices.

Hearing aids – Checkmark enables hearing aid compatibility.

Power button ends call – Allows you to end calls by pressing the Power/Lock Key instead of the End button on your screen.

Call barring – Lock incoming, outgoing or international calls.

Call duration – View the duration of calls including Last call, All calls, Dialed calls and Received calls.

Additional settings – Allows you to change the following settings:

Caller ID: Choose whether to display your number in an outgoing call.

Call waiting: If call waiting is activated, the handset will notify you of an incoming call while you are on a call (depending on your network provider).

< Tethering & networks >

USB tethering - Allows you to set up the ability to share your phone's mobile data connection using a USB connection.

Mobile HotSpot - Allows you to share mobile network via Wi-Fi and you can configure portable Wi-Fi hotspot settings.

Help - Help for USB tethering and Mobile Hotspot.

Wi-Fi Calling - Refer to previous page for Wi-Fi calling.

Mobile networks – Set options for data roaming, network mode & operators, access point names (APNs), and more.

Default SMS app – Allows you to set the default SMS app.

VPN – Displays the list of Virtual Private Networks (VPNs) that you've previously configured. Allows you to add different types of VPNs.

NOTE: You must set a lock screen PIN or password before you can use credential storage.

Sound

< Sound profile >

Choose Sound, Vibrate only or Silent.

< Volumes >

Adjust the phone's volume settings to suit your needs and your environment.

< Quiet mode >

Set up your Quiet mode.

Turn quiet mode on now – Tap the switch to toggle it on or off immediately.

Set quiet time – Tap the switch to toggle it On or Off. You can also set the days and times to automatically turn Quiet mode on.

Vibrate – Checkmark to vibrate when quiet mode is on.

Incoming call settings

Block incoming calls – Checkmark to block all incoming calls.

Allow repeated calls – Checkmark to allow a call that is repeated within 3

minutes.

Allowed contact lists – Designate which Contacts calls will be allowed.

Auto reply to blocked calls – Set how to you want to automatically reply to silenced calls.

Help – Tap to view help information on quiet mode.

< Phone ringtone >

Set the ringtone for calls. You can also add a ringtone by tapping at the top right corner of the screen.

< Incoming call vibration >

Sets the incoming call vibration Options.

< Ringtone with vibration >

Checkmark to set the phone to vibrate in addition to the ringtone when you receive calls.

< Voice notifications >

Tap the **Voice notifications** switch to toggle it On or Off. On allows your device to read out incoming call and message events automatically.

< Notification sound >

Allows you to set the sound for notifications. You can also add a sound by tapping at the top right corner of the screen.

< Touch feedback & system >

Allows you to set the feedback (tones and/or vibration) while using your device.

Display

< Home screen >

Set the **Select Home**, **Theme, Wallpaper, Screen swipe effect, Allow Home screen looping, Portrait view only, Home backup & restore, Help.**

< Lock screen >

Select screen lock – Set a screen lock type to secure your phone. Opens a set of screens that guide you through drawing a screen unlock pattern. Set **None,**

Swipe, Face Unlock, Pattern, PIN or **Password**.

If you have enabled a Pattern lock type when you turn on your phone or wake up the screen, you will be asked to draw your unlock pattern to unlock the screen.

Screen swipe effect – Sets the screen swipe effect options. Choose from **Dewdrop**, **White hole**.

NOTE: Screen swipe effect becomes Pattern effect if the screen lock is set to Pattern.

Wallpaper – Sets your Lock screen wallpaper. Select it from **Gallery** or **Wallpaper gallery**.

Shortcuts – Allows you to change the shortcuts on the **Swipe** Lock screen.

Lost phone contact – Checkmark to set the device owner's name to be displayed on the Lock screen. Tap ⚙ to enter the text to be displayed as the Owner info.

Lock timer – Sets the amount of time before the screen automatically locks after the screen has timed-out.

Power button instantly locks – Checkmark to instantly lock the screen when the Power/Lock Key is pressed. This setting overrides the Security lock timer setting.

< Brightness >

Adjusts the brightness of the screen. For best battery performance, use the dimmest comfortable brightness.

< Screen timeout >

Sets the amount of time before the screen times out.

< Screen-off effect >

Sets the screen-off effect. Choose from **Fade out**, **Black hole**, and **Retro TV**.

< Auto-rotate screen >

Checkmark to set the phone to automatically rotate the screen based on the phone orientation (portrait or landscape).

< Daydream >

Tap the Daydream switch to toggle it On or Off. On allows the set screensaver

to be displayed when the phone is sleeping while docked and/or charging. Choose from **Clock**, **Colors**, **Google Photos, Photo Frame**, and **Photo Table**.

< Font type >

Sets the type of font used for the phone and menus.

< Font size >

Sets the size of the font displayed in the phone and menus.

< Smart screen >

Checkmark to keep the screen from timing-out when the device detects your eyes looking at the screen.

< Smart video >

Checkmark to pause the video when it doesn't detect your eyes looking at the screen.

General

< Gestures >

Screen on/off – Checkmark to enable KnockON to turn the screen on and off. Quickly double-tap center screen to turn it on. Double-tap the Status Bar, an empty area on the Home screen, or the Lock screen to turn the screen off. For the best results, do not move the phone while using the KnockON feature.

Silence incoming calls – Checkmark to enable you to flip the phone to silence incoming calls.

Snooze or turn off alarm – Checkmark to enable you to simply flip the device to snooze or stop the alarm.

Pause video – Checkmark to enable you to simply flip the device to pause the currently playing video.

Move Home screen items – Checkmark to enable you to move an icon to another screen by tilting the phone. Tap and hold the icon and tilt the phone left or right, then let go on the screen where you want the icon.

Help – Opens a help guide on how to use the Gestures features of your device.

Motion sensor calibration – Allows you to improve the accuracy of the tilt and speed of the sensor.

< One-handed operation >

Dial keypad – Checkmark to enable you move the dial keypad to the right or left side of the device. Simply tap the arrow to move it to one side or the other.

LG keyboard – Checkmark to enable you move the keyboard to the right or left side of the device. Simply tap the arrow to move it to one side or the other.

Lock screen – Checkmark to enable you move the PIN Lock screen keypad to the right or left side of the device. Simply tap the arrow to move it to one side or the other.

Help – Displays information regarding one-handed operation.

< Storage >

INTERNAL STORAGE - Displays the total amount of space in the phone's memory and lists what type of data is using up space.

SD CARD - Displays the total amount of memory space on the microSD card.

Mount/Unmount SD card - Mounts and unmounts the microSD card from your phone so that you can access the data stored in it, format the card, or safely remove it. This setting is dimmed if there's no microSD card installed, if you've already unmounted it, or if you've mounted the microSD card on your computer.

Erase SD card - Permanently erases everything on the microSD card and prepares it for use with your phone.

< Battery >

BATTERY INFORMATION

See how much battery power is used for device activities. The battery level displays in a percentage. The remaining time of use is also displayed.

Battery percentage: Displays the battery percentage on the Status Bar.

POWER SAVER

Power saver - Manage the battery for the power saving items. Tap the switch OFF ON to turn this feature on. Tap **Power saver** for the following options.

TURN POWER SAVER ON

Turn Power saver on - Select the level you want to turn on the Power saver.

POWER SAVING ITEMS

Checkmark each feature to turn off or adjust when the battery is low.

- **Auto-sync**: Turns off Auto-sync.
- **Wi-Fi**: Turns off Wi-Fi if data is not in use.
- **Bluetooth**: Turns off Bluetooth if not connected.
- **Vibrate on touch**: Turns off touch feedback.
- **Brightness**: Adjust the brightness.
- **Screen timeout**: Adjust the screen timeout.
- **Front touch key light**: Adjust the front key light timeout.
- **Home button LED**: Turns off the Home button LED.

Power saver tips - Touch to access some tips for Power saver.

< Apps >

Use the Apps menu to view details about the applications installed on your phone, manage their data, and force them to stop.

< Accounts & sync >

Permits applications to synchronize data in the background, whether or not you are actively working in them. Deselecting this setting can save battery power and lower (but not eliminate) data usage.

< Guest mode >

To protect your privacy or limit some applications to your children, you can use the Guest mode. When you lend your phone to others, you can limit the applications to be displayed. In advance, set the Guest mode and customize the options.

< Location >

Turn on location service, your phone determines your approximate location using GPS, Wi-Fi and mobile networks.

Mode – Set the location mode from **High accuracy, Battery saving** and **Device sensors only**.

< Security >

Encrypt phone - Allows you to encrypt the phone to keep it secure. After encryption, a PIN or password needs to be entered each time you power the

phone on.

Set up SIM card lock – Set up Micro SIM card lock or change the Micro SIM PIN.

Password typing visible – Show the last character of the hidden password as you type.

Phone administrators – View or deactivate phone administrators.

Unknown sources – Allows you to install non-Play Store applications.

Trusted credentials – Display trusted CA certificates.

Install from storage – Choose to install encrypted certificates.

Clear credentials – Remove all certificates.

< Language & input >

Use the Language & input settings to select the language for the text on your phone and to configure the on-screen keyboard, including words you've added to its dictionary.

< Backup & reset >

Backup my data – Set to backup your settings and application data to the Google server.

Backup account – Set the account to which you want to backup data to.

Automatic restore – Set to restore your settings and application data when the applications are reinstalled on your device.

Collect diagnostics – Allows you to select if you want to allow diagnostic data to be sent to T-Mobile.

LG Backup service – Backs up all information on the device and restores it in the event of data loss or replacement.

Factory data reset – Reset your settings to the factory default values and delete all your data. If you reset the phone this way, you are prompted to re-enter the same information as when you first started Android.

< QuickButton >

Select the app you wish to get quick access to using QuickButton. Tap **Shortcut** and select the desired app to set it as the QuickButton.

< Date & time >

This menu allows you to set how dates will be displayed. You can also use these settings to set your own time and time zone rather than obtaining the current time from the mobile network.

< Accessibility >

Use the **Accessibility** settings to configure accessibility plug-ins you have installed on your phone.

NOTE: Requires additional plug-ins to become selectable.

SERVICES

- **TalkBack:** Allows you to set up the TalkBack function which assists people with impaired vision by providing verbal feedback. Tap the **TalkBack** switch OFF ON at the top right corner of the screen to turn it on. Tap **SETTINGS** at the bottom of the screen to adjust the TalkBack settings.

VISION

- **Install web scripts:** Allows you to enable (or disable) installation of web scripts.
- **Large text:** Checkmark to increase the size of the text.
- **Invert color:** Sets the color contrast for better screen viewing. Tap the check box to turn it on. Tap the menu item and tap the image on the screen until you see the color contrast you want to use.
- **Shades:** Sets the screen to a darker contrast (a darker shade).

HEARING

- **Mono audio:** Checkmark to route the sound through both the right and left channel when a headset is connected. To manually set the audio route, move the slider on the audio slide bar.

PHYSICAL AND MOTOR

- **Touch & hold delay:** Sets the touch and hold delay (short, medium, or long).
- **Universal touch:** Tap the switch OFF ON to toggle between on and off. Turn this feature on to replace the hardware keys with a Universal touch button. Tap the button to be able to access **Volume down, Volume up, Power, Home,** and **Pinch**. Draw a "C" on the screen when the Universal touch panel

is displayed to automatically display the Dial tab. Draw an "M" on the board to automatically display the Messaging application. Draw a "W" on the board to automatically launch the default browser application.

SYSTEM

- **Auto-rotate screen:** Checkmark to allow the device to rotate the screen depnding on the device orientation (portrait or landscape).
- **Speak passwords:** Checkmark so that you can say your log in passwords (instead of typing your passwords).
- **Power button ends call:** Checkmark so that you can end voice calls by pressing the **Power/Lock Key** . When this option is enabled, pressing the **Power/Lock Key** during a call does not lock the screen.
- **Easy access:** Turning this feature on allows you to activate an accessibility feature by pressing the Home Key three (3) times. Select an accessibility option to use with this feature from **Show all, TalkBack, Invert color, Universal touch,** and **Accessibility settings**.
- **Text-to-speech output:** Text-to-speech output provides audible readout of text, for example, the contents of text messages, and the Caller ID for incoming calls.

< PC connection >

Select USB connection method – Set the desired mode you want to use by default when connecting to a PC. Choose from **Charge only, Media sync (MTP), LG software** or **Camera (PTP)**.

Ask on connection – Ask in USB connection mode when connecting to a computer.

Help – Displays help information for the On-Screen Phone feature.

< Accessory >

QuickWindow case – Activate to make features, such as music, weather, and clock, available in small view when using the QuickWindow case.

Earphone – Sets the Plug & Pop feature for earphones. Checkmark the App panel option to automatically display the app panel when connecting an earphone. Tap Edit app panel to change the applications you want to make available.

< About phone >

View legal information and check your phone status and software version.

System updates – Allows you to check for Android system software updates and other current information.

Network – Allows you to view your network, network type and strength, service state, roaming status, mobile network state, and IP address.

Phone identity – Allows you to view the model number, phone number, IMEI, IMEI SV, and Up time.

Battery – Allows you to view battery status, battery level, and battery use information.

Hardware information – Allows you to view Wi-Fi MAC address and Bluetooth address.

Software information – Allows you to view Android version, baseband version, kernel version, build number, and software version.

Legal information – Allows you to view open source licenses and Google legal information.

Patent information – Displays LG patent information.

Phone software update

This feature allows you to update the firmware of your phone to the latest version conveniently from the internet without the need to visit a service center. For more information on how to use this function, please visit: http://www.lg.com

As the mobile phone firmware update requires the user's full attention for the duration of the update process, please make sure to check all instructions and notes that appear at each step before proceeding. Please note that removing the USB cable or battery during the upgrade may seriously damage your mobile phone.

LG Mobile Phone Software update via Over-the-Air (OTA)

This feature allows you to update the firmware of your phone to the newer version conveniently via OTA without connecting the USB data cable. This feature is only available if and when LG makes the newer version of the firmware available for your device. First, you can check the software version on your mobile phone:

From the Home screen, tap the **Menu Key** > **System settings** > **General** tap > **About phone** > **Software information**.

To perform the phone software update, from the Home screen, tap the **Menu Key** > **System settings** > **General** tap > **About phone** > **Update Center** > **System updates** > **Check now.**

NOTE: LG reserves the right to make firmware updates available only for selected models at its own discretion and does not guarantee the availability of the newer version of the firmware for all handset models.

NOTE: Your personal data—including information about your Google account and any other accounts, your system/application data and settings, any downloaded applications and your DRM licence —might be lost in the process of updating your phone's software. Therefore, LG recommends that you back up your personal data before updating your phone's software. LG does not take responsibility for any loss of personal data.

NOTICE: Open Source Software

To obtain the corresponding source code under GPL, LGPL, MPL and other open source licences, please visit http://opensource.lge.com/

All referred licence terms, disclaimers and notices are available for download with the source code.

Trademarks

Trademarks

- LG and the LG logo are registered trademarks of LG Group and its related entities.
- Bluetooth® is a registered trademark of the Bluetooth SIG, Inc. worldwide.
- Wi-Fi®, the Wi-Fi CERTIFIED logo, and the Wi-Fi logo are registered trademarks of the Wi-Fi Alliance.
- All other trademarks and copyrights are the property of their respective owners.

DivX Mobile

ABOUT DIVX VIDEO: DivX® is a digital video format created by DivX, LLC, a subsidiary of Rovi Corporation. This is an official DivX Certified® device that has passed rigorous testing to verity that it plays DivX video. Visit www.divx.com for more information and software tools to convert your files into DivX videos.
ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in your device setup menu. Go to vod.divx.com for more information on how to complete your registration.
DivX Certified® to play DivX® video up to HD 720p, including premium content. DivX®, DivX Certified® and associated logos are trademarks of Rovi Corporation or its subsidiaries and are used under license.

Dolby Digital Plus

Manufactured under license from Dolby Laboratories. Dolby, Dolby Digital Plus, and the double-D symbol are trademarks of Dolby Laboratories.

NOTICE: Open Source Software

To obtain the corresponding source code under GPL, LGPL, MPL and other open source licences, please visit http://opensource.lge.com. All referred licence terms, disclaimers and notices are available for download with the source code.

- Wi-Fi® and Wi-Fi Protected Access®are registered trademarks of the Wi-Fi Alliance.

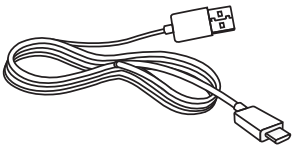
Accessories

These accessories are available for use with your phone. (Items described below may be optional and sold separately.)

Travel adapter

Data cable

Connect your phone and PC.



User Guide

Learn more about your phone.

Battery

NOTE:

- Always use genuine LG accessories. Failure to do this may void your warranty.
- Accessories may vary in different regions.

Troubleshooting

This chapter lists some problems you might encounter when using your phone. Some problems require you to call your service provider, but most are easy to fix yourself.

Message	Possible causes	Possible corrective measures
Micro SIM error	There is no Micro SIM card in the phone or it is inserted incorrectly.	Make sure that the Micro SIM card is correctly inserted.
No network connection/ Dropped network	Signal is weak or you are outside the carrier network.	Move toward a window or into an open area. Check the network operator coverage map.
	Operator applied new services.	Check whether the Micro SIM card is more than 6~12 months old. If so, change your Micro SIM at your network provider's nearest branch. Contact your service provider.
Codes do not match	To change a security code, you will need to confirm the new code by re-entering it.	If you forget the code, contact your service provider.
	The two codes you have entered do not match.	

Troubleshooting

Message	Possible causes	Possible corrective measures
No applications can be set	Not supported by service provider or registration required.	Contact your service provider.
Calls not available	Dialling error	New network not authorized.
	New Micro SIM card inserted.	Check for new restrictions.
	Pre-paid charge limit reached.	Contact service provider or reset limit with PIN2.
Phone cannot be switched on	Power/Lock Key pressed too briefly.	Press the Power/Lock Key for at least two seconds.
	Battery is not charged.	Charge battery. Check the charging indicator on the display.

Message	Possible causes	Possible corrective measures
Charging error	Battery is not charged.	Charge battery.
	Outside temperature is too hot or cold.	Make sure phone is charging at a normal temperature.
	Contact problem	Check the charger and its connection to the phone.
	No voltage	Plug the charger into a different socket.
	Charger defective	Replace the charger.
	Wrong charger	Use only original LG accessories.
Number not allowed	The Fixed dialling number function is on.	Check the Settings menu and turn the function off.
Impossible to receive / send text and picture messages	Memory full	Delete some messages from your phone.
Files do not open	Unsupported file format	Check the supported file formats.

Troubleshooting

Message	Possible causes	Possible corrective measures
The screen does not turn on when I receive a call.	Proximity sensor problem	If you use a protection tape or case, make sure it has not covered the area around the proximity sensor. Make sure that the area around the proximity sensor is clean.
No sound	Vibration mode	Check the settings status in the sound menu to make sure you are not in vibration or silent mode.
Hangs up or freezes	Intermittent software problem	Try to perform a software update via the website.

Safety Information

Please read and observe the following information for safe and proper use of your phone and to prevent damage.

WARNING! This product contains chemicals known to the State of California to cause cancer and birth defects or reproductive harm. ***Wash hands after handling.***

Caution Violation of the instructions may cause minor or serious damage to the product.

- Do not disassemble or open crush, bend or deform, puncture or shred.
- Repairs under warranty, at LG's option, may include replacement parts or boards that are either new or reconditioned, provided that they have functionality equal to that of the parts being replaced.
- Do not modify or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water or other liquids, expose to fire, explosion or other hazard.
- Only use the battery for the system for which it is specified.
- Only use the battery with a charging system that has been qualified with the system per this standard. Use of an unqualified battery or charger may present a risk of fire, explosion, leakage, or other hazard.
- Do not short circuit a battery or allow metallic conductive objects to contact battery terminals.
- Replace the battery only with another battery that has been qualified with the system per this standard, IEEE-Std-1725-200x. Use of an unqualified battery may present a risk of fire, explosion, leakage or other hazard.
- Promptly dispose of used batteries in accordance with local regulations.
- Battery usage by children should be supervised.
- Avoid dropping the phone or battery. If the phone or battery is dropped, especially on a hard surface, and the user suspects damage, take it to a service center for inspection.
- Improper battery use may result in a fire, explosion or other hazard.

- For those host devices that utilize a USB port as a charging source, the host device's user manual shall include a statement that the phone shall only be connected to products that bear the USB-IF logo or have completed the USB-IF compliance program.

Charger and Adapter Safety

- The charger and adapter are intended for indoor use only.
- Insert the battery pack charger vertically into the wall power socket.
- Unplug the power cord and charger during lightning storms to avoid electric shock or fire.
- Use the correct adapter for your phone when using the battery pack charger abroad.

Battery Information and Care

- Please read the manual of proper installation and removal of the battery.
- Please read the manual of specified charger about charging method.
- Do not damage the power cord by bending, twisting, or heating. Do not use the plug if it is loose as it may cause electric shock or fire.
  Do not place any heavy items on the power cord. Do not allow the power cord to be crimped as it may cause electric shock or fire.
- Unplug the power cord prior to cleaning your phone, and clean the power plug pin when it's dirty. When using the power plug, ensure that it's firmly connected. If not, it may cause excessive heat or fire. If you put your phone in a pocket or bag without covering the receptacle of the phone (power plug pin), metallic articles (such as a coin, paperclip or pen) may short-circuit the phone. Short-circuit of the terminal may damage the battery and cause an explosion. Always cover the receptacle when not in use.
- Recharge the battery after long periods of non-use to maximize battery life. Battery life will vary due to usage pattern and environmental conditions.
- Never store your phone in temperature less than -4 °F or greater than 122 °F.

- Charging temperature range is between 32 °F and 113 °F. Do not charge the battery out of recommended temperature range. Charging out of recommended range might cause the generating heat or serious damage of battery. And also, it might cause the deterioration of battery's characteristics and cycle life.
- Do not use or leave the battery under the blazing sun or in heated car by sunshine. The battery may generate heat, smoke or flame. And also, it might cause the deterioration of battery's characteristics or cycle life.
- The battery pack has protection circuit to avoid the danger. Do not use near places that can generate static electricity more than 100V which could damage the protection circuit. Damaged protection circuits may generate smoke, rupture or ignite.
- When using the battery for the first time, if it emits a bad smell, you see rust on it, or anything else abnormal, do not use the equipment and bring the battery to the shop which it was bought.
- Keep batteries away from babies and small children. If children use the battery, their parents or legal guardians are responsible for supervising and teaching them about the safe handling of batteries and how to use batteries according to the manual with care.
- If liquid from the battery rubs against skin or clothing, wash with fresh water. It may cause the skin inflammation. Remove and do not use the battery. Be careful that children do not swallow any parts (such as earphone, connection parts of the phone, etc.). This could cause asphyxiation or suffocation resulting in serious injury or death.
- Do not handle the phone with wet hands while it is being charged. It may cause an electric shock or seriously damage your phone.
- Do not place or answer calls while charging the phone as it may short-circuit the phone and/or cause electric shock or fire.
- Do not use harsh chemicals (such as alcohol, benzene, thinners, etc.) or detergents to clean your phone. This could cause a fire.
- Always unplug the charger from the wall socket after the phone is fully charged to save unnecessary power consumption of the charger.

Care and Maintenance

Your mobile device is a product of superior design and craftsmanship and should be treated with care. The suggestions below will help you fulfill any warranty obligations and allow you to enjoy this product for many years:

Keep your Mobile Device away from:

Liquids of any kind

Keep the mobile device dry. Precipitation, humidity, and liquids contain minerals that will corrode electronic circuits. If the mobile device does get wet, do not accelerate drying with the use of an oven, microwave, or dryer, because this may damage the mobile device and could cause a fire or explosion.

Do not use the mobile device with a wet hand.

Doing so may cause an electric shock to you or damage to the mobile device.

Extreme heat or cold

- Avoid temperatures below 0°C / 32°F or above 45°C / 113°F.
- Use your phone in temperatures between 0°C /32°F and 40°C/104°F, if possible. Exposing your phone to extremely low or high temperatures may result in damage, malfunction, or even explosion.

Microwaves

Do not try to dry your mobile device in a microwave oven. Doing so may cause a fire or explosion.

Dust and dirt

Do not expose your mobile device to dust, dirt, or sand.

Sunscreen lotion

Do not expose or wear your device to any liquid like sunscreen lotion.

Doing so may cause your device to or damage to the mobile device.

Cleaning solutions

Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the mobile device.

Wipe it with a soft cloths lightly dampened in a mild soap-and-water solution.

Shock or vibration

Do not drop, knock, or shake the mobile device.

Rough handling can break internal circuit boards.

Paint

Do not paint the mobile device. Paint can clog the device'smoving parts or ventilation openings and prevent proper operation.

General Notice

- An emergency call can be made only within a service area. For an emergency call, make sure that you are within a service area and that the phone is turned on.
- Do not place items containing magnetic components such as a credit card, phone card, bank book, or subway ticket near your phone. The magnetism of the phone may damage the data stored in the magnetic strip.
- Talking on your phone for a long period of time may reduce call quality due to heat generated during use.
- When the phone is not used for a long period time, store it in a safe place with the power cord unplugged.
- Using the phone in proximity to receiving equipment (i.e., TV or radio) may cause interference to the phone.
- Do not use the phone if the antenna is damaged. If a damaged antenna contacts skin, it may cause a slight burn. Please contact an LG Authorized Service Center to replace the damaged antenna.
- The data saved in your phone might be deleted due to careless use, repair of the phone, or upgrade of the software. Please backup your important phone numbers. (Ringtones, text messages, voice messages, pictures, and videos could also be deleted.) The manufacturer is not liable for damage due to the loss of data.

- When you use the phone in public places, set the ringtone to vibration so you don't disturb others.
- Do not turn your phone on or off when putting it to your ear.
- Your phone is an electronic device that generates heat during normal operation. Extremely prolonged, direct skin contact in the absence of adequate ventilation may result in discomfort or minor burns. Therefore, use care when handling your phone during or immediately after operation.

Use accessories, such as earphones and headsets, with caution. Ensure that cables are tucked away safely and do not touch the antenna unnecessarily.

Part 15.19 statement

This device complies with part 15 of FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that causes undesired operation.

Part 15.21 statement

Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Part 15.105 statement

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. if this equipment does cause harmful interference or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC RF Exposure Information

WARNING! Read this information before operating the phone.

In August 1996, the Federal Communications Commission (FCC) of the United States, with its action in Report and Order FCC 96-326, adopted an updated safety standard for human exposure to Radio Frequency (RF) electromagnetic energy emitted by FCC regulated transmitters. Those guidelines are consistent with the safety standard previously set by both U.S. and international standards bodies. The design of this phone complies with the FCC guidelines and these international standards.

Bodily Contact During Operation

This device was tested for typical use with the back of the phone kept 0.39 inches (1 cm) from the body. To comply with FCC RF exposure requirements, a minimum separation distance of 0.39 inches (1 cm) must be maintained between the user's body and the back of the phone. Third-party belt-clips, holsters, and similar accessories containing metallic components may not be used. Avoid the use of accessories that cannot maintain 0.39 inches (1 cm) distance between the user's body and the back of the phone and have not been tested for compliance with FCC RF exposure limits.

Vehicle-Mounted External Antenna

(Optional, if available.)

To satisfy FCC RF exposure requirements, keep 8 inches (20 cm) between the user / bystander and vehicle-mounted external antenna. For more information about RF exposure, visit the FCC website at www.fcc.gov.

Caution

Use only the supplied antenna. Use of unauthorized antennas (or modifications to the antenna) could impair call quality, damage the phone, void your warranty and/or violate FCC regulations.

Don't use the phone with a damaged antenna. A damaged antenna could cause a minor skin burn. Contact your local dealer for a replacement antenna.

Consumer Information About Radio Frequency Emissions

Your wireless phone, which contains a radio transmitter and receiver, emits radio frequency energy during use. The following consumer information addresses commonly asked questions about the health effects of wireless phones.

Are wireless phones safe?

Scientific research on the subject of wireless phones and radio frequency ("RF") energy has been conducted worldwide for many years, and continues. In the United States, the Food and Drug Administration ("FDA") and the Federal Communications Commission ("FCC") set policies and procedures for wireless phones. The FDA issued a website publication on health issues related to cell phone usage where it states, "The scientific community at large ... believes that the weight of scientific evidence does not show an association between exposure to radiofrequency (RF) from cell phones and adverse health outcomes. Still the scientific community does recommend conducting additional research to address gaps in knowledge. That research is being conducted around the world and FDA continues to monitor developments in this field. You can access the joint FDA/FCC website at http://www.fda.gov (under "C" in the subject index, select Cell Phones > Research). You can also contact the FDA toll-free at (888) 463-6332 or (888) INFO-FDA. In June 2000, the FDA entered into a cooperative research and development agreement through which additional scientific research is being conducted. The FCC issued its own website publication stating that "there is no scientific evidence that proves that wireless phone usage can lead to cancer or a variety of other problems, including headaches, dizziness or memory loss."

This publication is available at http://www.fcc.gov/oet/rfsafety or through the FCC at (888) 225-5322 or (888) CALL-FCC.

What does "SAR" mean?

In 1996, the FCC, working with the FDA, the U.S. Environmental Protection Agency, and other agencies, established RF exposure safety guidelines for wireless phones in the United States. Before a wireless phone model is available for sale to the public, it must be tested by the manufacturer and certified to the FCC that it does not exceed limits established by the FCC. One of these limits is expressed as a Specific Absorption Rate, or "SAR." SAR is a measure of the rate of absorption of RF energy in the body. Tests for SAR are conducted with the phone transmitting at its highest power level in all tested frequency bands. Since 1996, the FCC has required that the SAR of handheld wireless phones not exceed 1.6 watts per kilogram, averaged over one gram of tissue.

Although the SAR is determined at the highest power level, the actual SAR value of a wireless phone while operating can be less than the reported SAR value. This is because the SAR value may vary from call to call, depending on factors such as proximity to a cell site, the proximity of the phone to the body while in use, and the use of hands-free devices. Before a phone model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government-adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model.

The highest SAR value for this model phone when tested for use at the ear is 0.00 W/kg and when worn on the body, as described in this user guide, is 0.00 W/kg (body-worn measurements differ among phone models, depending upon available accessories and FCC requirements).

While there may be differences between SAR levels of various phones and at various positions, they all meet the government requirement for safe exposure.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF emission guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of http://www.fcc.gov/oet/ea/

fccid/ after searching on FCC ID ZNFD415RD.

For more information about SARs, see the FCC's OET Bulletins 56 and 65 at http://www.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins or visit the Cellular Telecommunications Industry Association website at http://www.ctia.org/consumer_info/index.cfm/AID/10371. You may also wish to contact the manufacturer of your phone.

Can I minimize my RF exposure?

If you are concerned about RF, there are several simple steps you can take to minimize your RF exposure. You can, of course, reduce your talk time. You can place more distance between your body and the source of the RF, as the exposure level drops off dramatically with distance. The FDA/FCC website states that "hands-free kits can be used with wireless phones for convenience and comfort. These systems reduce the absorption of RF energy in the head because the phone, which is the source of the RF emissions, will not be placed against the head. On the other hand, if the phone is mounted against the waist or other part of the body during use, then that part of the body will absorb more RF energy. Wireless phones marketed in the U.S. are required to meet safety requirements regardless of whether they are used against the head or against the body. Either configuration should result in compliance with the safety limit." Also, if you use your wireless phone while in a car, you can use a phone with an antenna on the outside of the vehicle. You should also read and follow your wireless phone manufacturer's instructions for the safe operation of your phone.

Do wireless phones pose any special risks to children?

The FDA/FCC website states that "the scientific evidence does not show a danger to users of wireless communication devices, including children." The FDA/FCC website further states that "some groups sponsored by other national governments have advised that children be discouraged from using wireless phones at all". For example, the Stewart Report from the United Kingdom ["UK"] made such a recommendation in December 2000. In this report a group of independent experts noted that no evidence exists that using a cell phone causes brain tumors or other ill effects. [The UK's] recommendation to limit cell phone use by children was strictly precautionary; it was not based on

scientific evidence that any health hazard exists. A copy of the UK's leaflet is available at http://www.dh.gov.uk (search "mobile"), or you can write to: NRPB, Chilton, Didcot, Oxon OX11 ORQ, United Kingdom. Copies of the UK's annual reports on mobile phones and RF are available online at www.iegmp.org.uk and http://www.hpa.org.uk/radiation/ (search "mobile"). Parents who wish to reduce their children's RF exposure may choose to restrict their children's wireless phone use.

Where can I get further information about RF emissions?

For further information, see the following additional resources (websites current as of April 2005):

U.S. Food and Drug Administration

FDA Consumer magazine
November-December 2000
Telephone: (888) INFO-FDA
http://www.fda.gov (Under "C" in the subject index, select Cell Phones > Research.)

U.S. Federal Communications Commission

445 12th Street, S.W.
Washington, D.C. 20554
Telephone: (888) 225-5322
http://www.fcc.gov/oet/rfsafety

Independent Expert Group on Mobile Phones

http://www.iegmp.org.uk

Royal Society of Canada Expert Panels on Potential Health Risks of Radio Frequency Fields from Wireless Telecommunication Devices

283 Sparks Street
Ottawa, Ontario K1R 7X9
Canada
Telephone: (613) 991-6990

World Health Organization

Avenue Appia 20
1211 Geneva 27
Switzerland
Telephone: 011 41 22 791 21 11
http://www.who.int/mediacentre/factsheets/fs193/en/

International Commission on Non-Ionizing Radiation Protection

c/o Bundesamt fur Strahlenschutz
Ingolstaedter Landstr. 1
85764 Oberschleissheim
Germany
Telephone: 011 49 1888 333 2156
http://www.icnirp.de

American National Standards Institute

1819 L Street, N.W., 6th Floor
Washington, D.C. 20036
Telephone: (202) 293-8020
http://www.ansi.org

National Council on Radiation Protection and Measurements

7910 Woodmont Avenue, Suite 800
Bethesda, MD 20814-3095
Telephone: (301) 657-2652
http://www.ncrponline.org

Engineering in Medicine and Biology Society, Committee on Man and Radiation (COMAR) of the Institute of Electrical and Electronics Engineers

http://ewh.ieee.org/soc/embs/comar/

TIA Safety Information

The following is the complete TIA Safety Information for wireless handheld phones.

Exposure to Radio Frequency Signal

Your wireless handheld portable phone is a low power radio transmitter and receiver. When ON, it receives and sends out Radio Frequency (RF) signals.

In August, 1996, the Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for handheld wireless phones. Those guidelines are consistent with the safety standards previously set by both U.S. and international standards bodies:

ANSI C95.1 (1992) *
NCRP Report 86 (1986)
ICNIRP (1996)

* American National Standards Institute; National Council on Radiation Protection and Measurements; International Commission on Non-Ionizing Radiation Protection

Those standards were based on comprehensive and periodic evaluations of the relevant scientific literature. For example, over 120 scientists, engineers, and physicians from universities, government health agencies, and industry reviewed the available body of research to develop the ANSI Standard (C95.1).

The design of your phone complies with the FCC guidelines (and those standards).

Antenna Care

Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the phone and may violate FCC regulations.

Phone Operation

NORMAL POSITION: Hold the phone as you would any other telephone with the antenna pointed up and over your shoulder.

Tips on Efficient Operation

For your phone to operate most efficiently:

Don't touch the antenna unnecessarily when the phone is in use. Contact with the antenna affects call quality and may cause the phone to operate at a higher power level than otherwise needed.

Electronic Devices

Most modern electronic equipment is shielded from RF signals. However, certain electronic equipment may not be shielded against the RF signals from your wireless phone.

Pacemakers

The Health Industry Manufacturers Association recommends that a minimum separation of six (6) inches be maintained between a handheld wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research.

Persons with pacemakers:

- Should ALWAYS keep the phone more than six (6) inches from their pacemaker when the phone is turned ON;
- Should not carry the phone in a breast pocket;
- Should use the ear opposite the pacemaker to minimize the potential for interference;
- Should turn the phone OFF immediately if there is any reason to suspect that interference is taking place.

Hearing Aids

Some digital wireless phones may interfere with some hearing aids. In the event of such interference, you may want to consult your service provider (or call the customer service line to discuss alternatives).

Other Medical Devices

If you use any other personal medical device, consult the manufacturer of your device to determine if it is adequately shielded from external RF energy. Your physician may be able to assist you in obtaining this information.

Health Care Facilities

Turn your phone OFF in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may use equipment that could be sensitive to external RF energy.

Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. Check with the manufacturer or its representative regarding your vehicle. You should also consult the manufacturer of any equipment that has been added to your vehicle.

Posted Facilities

Turn your phone OFF in any facility where posted notices so require.

Aircraft

FCC regulations prohibit using your phone while in the air. Switch OFF your phone before boarding an aircraft.

Blasting Areas

To avoid interfering with blasting operations, turn your phone OFF when in a "blasting area" or in areas posted: "Turn off two-way radio". Obey all signs and instructions.

Potentially Explosive Atmosphere

Turn your phone OFF when in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Areas with a potentially explosive atmosphere are often, but not always marked clearly. Potential areas may include: fueling areas (such as gasoline stations); below deck on boats; fuel or chemical transfer or storage facilities; vehicles using liquefied petroleum gas (such as propane or butane); areas where the air

contains chemicals or particles (such as grain, dust, or metal powders); and any other area where you would normally be advised to turn off your vehicle engine.

For Vehicles Equipped with an Air Bag

An air bag inflates with great force. DO NOT place objects, including either installed or portable wireless equipment, in the area over the air bag or in the air bag deployment area. If in-vehicle wireless equipment is improperly installed and the air bag inflates, serious injury could result.

FDA Consumer Update

The U.S. Food and Drug Administration's Center for Devices and Radiological Health Consumer Update on Mobile Phones:

1. Do wireless phones pose a health hazard?

The available scientific evidence does not show that any health problems are associated with using wireless phones.

There is no proof, however, that wireless phones are absolutely safe. Wireless phones emit low levels of Radio Frequency (RF) energy in the microwave range while being used. They also emit very low levels of RF when in idle mode. Whereas high levels of RF can produce health effects (by heating tissue), exposure to low level RF that does not produce heating effects causes no known adverse health effects. Many studies of low level RF exposures have not found any biological effects. Some studies have suggested that some biological effects may occur, but such findings have not been confirmed by additional research. In some cases, other researchers have had difficulty in reproducing those studies, or in determining the reasons for inconsistent results.

2. What is the FDA's role concerning the safety of wireless phones?

Under the law, the FDA does not review the safety of radiation-emitting consumer products such as wireless phones before they can be sold, as it does with new drugs or medical devices. However, the agency has authority to take action if wireless phones are shown to emit Radio Frequency (RF) energy at a

level that is hazardous to the user. In such a case, the FDA could require the manufacturers of wireless phones to notify users of the health hazard and to repair, replace, or recall the phones so that the hazard no longer exists.

Although the existing scientific data does not justify FDA regulatory actions, the FDA has urged the wireless phone industry to take a number of steps, including the following:

- Support needed research into possible biological effects of RF of the type emitted by wireless phones;
- Design wireless phones in a way that minimizes any RF exposure to the user that is not necessary for device function; and
- Cooperate in providing users of wireless phones with the best possible information on possible effects of wireless phone use on human health.

The FDA belongs to an interagency working group of the federal agencies that have responsibility for different aspects of RF safety to ensure coordinated efforts at the federal level. The following agencies belong to this working group:

- National Institute for Occupational Safety and Health
- Environmental Protection Agency
- Occupational Safety and Health Administration
- National Telecommunications and Information Administration

The National Institutes of Health participates in some interagency working group activities, as well.

The FDA shares regulatory responsibilities for wireless phones with the Federal Communications Commission (FCC). All phones that are sold in the United States must comply with FCC safety guidelines that limit RF exposure. The FCC relies on the FDA and other health agencies for safety questions about wireless phones.

The FCC also regulates the base stations that the wireless phone networks rely upon. While these base stations operate at higher power than do the wireless phones themselves, the RF exposures that people get from these base stations are typically thousands of times lower than those they can get from wireless phones. Base stations are thus not the subject of the safety questions discussed in this document.

3. What kinds of phones are the subject of this update?

The term "wireless phone" refers here to handheld wireless phones with built-in antennas, often called "cell", "mobile", or "PCS" phones. These types of wireless phones can expose the user to measurable Radio Frequency (RF) energy because of the short distance between the phone and the user's head. These RF exposures are limited by FCC safety guidelines that were developed with the advice of the FDA and other federal health and safety agencies. When the phone is located at greater distances from the user, the exposure to RF is drastically lower because a person's RF exposure decreases rapidly with increasing distance from the source. The so-called "cordless phones," which have a base unit connected to the telephone wiring in a house, typically operate at far lower power levels, and thus produce RF exposures far below the FCC safety limits.

4. What are the results of the research done already?

The research done thus far has produced conflicting results, and many studies have suffered from flaws in their research methods. Animal experiments investigating the effects of Radio Frequency (RF) energy exposures characteristic of wireless phones have yielded conflicting results that often cannot be repeated in other laboratories. A few animal studies, however, have suggested that low levels of RF could accelerate the development of cancer in laboratory animals. However, many of the studies that showed increased tumor development used animals that had been genetically engineered or treated with cancer-causing chemicals so as to be pre-disposed to develop cancer in the absence of RF exposure. Other studies exposed the animals to RF for up to 22 hours per day. These conditions are not similar to the conditions under which people use wireless phones, so we do not know with certainty what the results of such studies mean for human health. Three large epidemiology studies have been published since December 2000. Between them, the studies investigated any possible association between the use of wireless phones and primary brain cancer, glioma, meningioma, or acoustic neuroma, tumors of the brain or salivary gland, leukemia, or other cancers. None of the studies demonstrated the existence of any harmful health effects from wireless phone RF exposures. However, none of the studies can answer questions about

long-term exposures, since the average period of phone use in these studies was around three years.

5. What research is needed to decide whether RF exposure from wireless phones poses a health risk?

A combination of laboratory studies and epidemiological studies of people actually using wireless phones would provide some of the data that are needed. Lifetime animal exposure studies could be completed in a few years. However, very large numbers of animals would be needed to provide reliable proof of a cancer promoting effect if one exists. Epidemiological studies can provide data that is directly applicable to human populations, but ten or more years follow-up may be needed to provide answers about some health effects, such as cancer. This is because the interval between the time of exposure to a cancer-causing agent and the time tumors develop — if they do — may be many, many years. The interpretation of epidemiological studies is hampered by difficulties in measuring actual RF exposure during day-to-day use of wireless phones. Many factors affect this measurement, such as the angle at which the phone is held, or which model of phone is used.

6. What is the FDA doing to find out more about the possible health effects of wireless phone RF?

The FDA is working with the U.S. National Toxicology Program and with groups of investigators around the world to ensure that high priority animal studies are conducted to address important questions about the effects of exposure to Radio Frequency (RF) energy.

The FDA has been a leading participant in the World Health Organization International Electro Magnetic Fields (EMF) Project since its inception in 1996. An influential result of this work has been the development of a detailed agenda of research needs that has driven the establishment of new research programs around the world. The project has also helped develop a series of public information documents on EMF issues.

The FDA and the Cellular Telecommunications & Internet Association (CTIA) have a formal Cooperative Research And Development Agreement (CRADA) to do research on wireless phone safety. The FDA provides the scientific

oversight, obtaining input from experts in government, industry, and academic organizations. CTIA-funded research is conducted through contracts with independent investigators. The initial research will include both laboratory studies and studies of wireless phone users. The CRADA will also include a broad assessment of additional research needs in the context of the latest research developments around the world.

7. How can I find out how much Radio Frequency energy exposure I can get by using my wireless phone?

All phones sold in the United States must comply with Federal Communications Commission (FCC) guidelines that limit Radio Frequency (RF) energy exposures. The FCC established these guidelines in consultation with the FDA and the other federal health and safety agencies. The FCC limit for RF exposure from wireless phones is set at a Specific Absorption Rate (SAR) of 1.6 watts per kilogram (1.6 W/kg). The FCC limit is consistent with the safety standards developed by the Institute of Electrical and Electronic Engineering (IEEE) and the National Council on Radiation Protection and Measurement. The exposure limit takes into consideration the body's ability to remove heat from the tissues that absorb energy from the wireless phone and is set well below levels known to have effects. Manufacturers of wireless phones must report the RF exposure level for each model of phone to the FCC. The FCC website (http://www.fcc.gov/oet/rfsafety) gives directions for locating the FCC identification number on your phone so you can find your phone's RF exposure level in the online listing.

8. What has the FDA done to measure the Radio Frequency energy coming from wireless phones?

The Institute of Electrical and Electronic Engineers (IEEE) is developing a technical standard for measuring the Radio Frequency (RF) energy exposure from wireless phones and other wireless handsets with the participation and leadership of FDA scientists and engineers. The standard, "Recommended Practice for Determining the Spatial-Peak Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques", sets forth the first consistent test methodology for measuring the

rate at which RF is deposited in the heads of wireless phone users. The test method uses a tissue-simulating model of the human head. Standardized SAR test methodology is expected to greatly improve the consistency of measurements made at different laboratories on the same phone. SAR is the measurement of the amount of energy absorbed in tissue, either by the whole body or a small part of the body. It is measured in watts/kg (or milliwatts/g) of matter. This measurement is used to determine whether a wireless phone complies with safety guidelines.

9. What steps can I take to reduce my exposure to Radio Frequency energy from my wireless phone?

If there is a risk from these products — and at this point we do not know that there is — it is probably very small. But if you are concerned about avoiding even potential risks, you can take a few simple steps to minimize your exposure to Radio Frequency (RF) energy. Since time is a key factor in how much exposure a person receives, reducing the amount of time spent using a wireless phone will reduce RF exposure. If you must conduct extended conversations by wireless phone every day, you could place more distance between your body and the source of the RF, since the exposure level drops off dramatically with distance. For example, you could use a headset and carry the wireless phone away from your body or use a wireless phone connected to a remote antenna. Again, the scientific data does not demonstrate that wireless phones are harmful. But if you are concerned about the RF exposure from these products, you can use measures like those described above to reduce your RF exposure from wireless phone use.

10. What about children using wireless phones?

The scientific evidence does not show a danger to users of wireless phones, including children and teenagers. If you want to take steps to lower exposure to Radio Frequency (RF) energy, the measures described above would apply to children and teenagers using wireless phones. Reducing the time of wireless phone use and increasing the distance between the user and the RF source will reduce RF exposure.

Some groups sponsored by other national governments have advised that

children be discouraged from using wireless phones at all. For example, the government in the United Kingdom distributed leaflets containing such a recommendation in December 2000. They noted that no evidence exists that using a wireless phone causes brain tumors or other ill effects. Their recommendation to limit wireless phone use by children was strictly precautionary; it was not based on scientific evidence that any health hazard exists.

11. What about wireless phone interference with medical equipment?

Radio Frequency (RF) energy from wireless phones can interact with some electronic devices. For this reason, the FDA helped develop a detailed test method to measure Electro Magnetic Interference (EMI) of implanted cardiac pacemakers and defibrillators from wireless telephones. This test method is now part of a standard sponsored by the Association for the Advancement of Medical Instrumentation (AAMI). The final draft, a joint effort by the FDA, medical device manufacturers, and many other groups, was completed in late 2000. This standard will allow manufacturers to ensure that cardiac pacemakers and defibrillators are safe from wireless phone EMI.

The FDA has tested hearing aids for interference from handheld wireless phones and helped develop a voluntary standard sponsored by the Institute of Electrical and Electronic Engineers (IEEE). This standard specifies test methods and performance requirements for hearing aids and wireless phones so that no interference occurs when a person uses a "compatible" phone and a "compatible" hearing aid at the same time. This standard was approved by the IEEE in 2000.

The FDA continues to monitor the use of wireless phones for possible interactions with other medical devices. Should harmful interference be found to occur, the FDA will conduct testing to assess the interference and work to resolve the problem.

12. Where can I find additional information?

For additional information, please refer to the following resources:

Federal Communications Commission (FCC) RF Safety Program (http://www.fcc.gov/oet/rfsafety)

International Commission on Non-Ionizing Radiation Protection
(http://www.icnirp.de)
World Health Organization (WHO) International EMF Project
(http://www.who.int/emf)
National Radiological Protection Board (UK)
(http://www.hpa.org.uk/radiation/)

Driving

Check the laws and regulations on the use of wireless phones in the areas where you drive and always obey them. Also, if using your phone while driving, please observe the following:

- Give full attention to driving -- driving safely is your first responsibility;
- Use hands-free operation, if available;
- Pull off the road and park before making or answering a call if driving conditions or the law require it.

HAC statement

This phone has been tested and rated for use with hearing aids for some of the wireless technologies that it uses.

However, there may be some newer wireless technologies used in this phone that have not been tested yet for use with hearing aids.

It is important to try the different features of this phone thoroughly and in different locations, using your hearing aid or cochlear implant, to determine if you hear any interfering noise.

Consult your service provider or the manufacturer of this phone for information on hearing aid compatibility.

If you have questions about return or exchange policies, consult your service provider or phone retailer.

FCC Hearing-Aid Compatibility (HAC) Regulations for Wireless Devices

On July 10, 2003, the U.S. Federal Communications Commission (FCC) Report and Order in WT Docket 01-309 modified the exception of wireless phones under the Hearing Aid Compatibility Act of 1988 (HAC Act) to require digital wireless phones be compatible with hearing-aids. The intent of the HAC Act is to ensure reasonable access to telecommunications services for persons with hearing disabilities.

While some wireless phones are used near some hearing devices (hearing aids and cochlear implants), users may detect a buzzing, humming, or whining noise. Some hearing devices are more immune than others to this interference noise, and phones also vary in the amount of interference they generate.

The wireless telephone industry has developed a rating system for wireless phones, to assist hearing device users to find phones that may be compatible with their hearing devices. Not all phones have been rated. Phones that are rated have the rating on their box or a label located on the box.

The ratings are not guarantees.

Results will vary depending on the user's hearing device and hearing loss. If your hearing device happens to be vulnerable to interference, you may not be able to use a rated phone successfully.

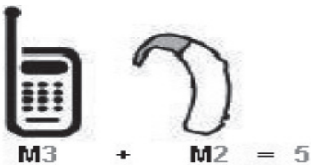
Trying out the phone with your hearing device is the best way to evaluate it for your personal needs.

M-Ratings: Phones rated M3 or M4 meet FCC requirements and are likely to generate less interference to hearing devices than phones that are not labeled. M4 is the better/higher of the two ratings.

T-Ratings: Phones rated T3 or T4 meet FCC requirements and are likely to generate less interference to hearing devices than phones that are not labeled. T4 is the better/higher of the two ratings.

Hearing devices may also be rated. Your hearing device manufacturer or hearing health professional may help you find this rating. Higher ratings mean that the hearing device is relatively immune to interference noise. The hearing aid and wireless phone rating values are then added together. A sum of 5 is considered acceptable for normal use.

A sum of 6 is considered for best use.



In the above example, if a hearing aid meets the M2 level rating and the wireless phone meets the M3 level rating, the sum of the two values equal M5. This should provide the hearing aid user with "normal usage" while using their hearing aid with the particular wireless phone. "Normal usage" in this context is defined as a signal quality that's acceptable for normal operation.

The M mark is intended to be synonymous with the U mark. The T mark is intended to be synonymous with the UT mark.

The M and T marks are recommended by the Alliance for Telecommunications Industries Solutions (ATIS). The U and UT marks are referenced in Section 20.19 of the FCC Rules.

The HAC rating and measurement procedure are described in the American National Standards Institute (ANSI) C63.19 standard.

When you're talking on a cell phone, it's recommended that you turn the BT (Bluetooth) or WLAN mode off for HAC.

For information about hearing aids and digital wireless phones

Wireless Phones and Hearing Aid Accessibility
http://www.accesswireless.org/Home.aspx

FCC Hearing Aid Compatibility and Volume Control
http://www.fcc.gov/cgb/consumerfacts/hac_wireless.html

For Your Safety

Wi-Fi Caution

This device is capable of operating in 802.11a/n mode. For 802.11 a/n devices operating in the frequency range of 5.15~5.25 GHz, they are restricted for indoor operations to reduce any potential harmful interference for Mobile Satellite Services (MSS) in the US. WiFi Access Points that are capable of allowing your device to operate in 802.11 a/n mode (5.15 - 5.25 GHz band) are optimized for indoor use only. If your WiFi network is capable of operating in this mode, please restrict your WiFi use indoors to not violate federal regulations to protect Mobile Satellite Services.

Limited Warranty Statement

1. WHAT THIS WARRANTY COVERS:

LG offers you a limited warranty that the enclosed subscriber unit and its enclosed accessories will be free from defects in material and workmanship, according to the following terms and conditions:

(1) The limited warranty for the product extends for TWELVE (12) MONTHS beginning on the date of purchase of the product with valid proof of purchase, or absent valid proof of purchase, FIFTEEN (15) MONTHS from date of manufacture as determined by the unit's manufacture date code.

(2) The limited warranty extends only to the original purchaser of the product and is not assignable or transferable to any subsequent purchaser/end user.

(3) This warranty is good only to the original purchaser of the product during the warranty period as long as it is in the U.S., including Alaska, Hawaii, U.S. Territories and Canada.

(4) The external housing and cosmetic parts shall be free of defects at the time of shipment and, therefore, shall not be covered under these limited warranty terms.

(5) Upon request from LG, the consumer must provide information to reasonably prove the date of purchase.

(6) The customer shall bear the cost of shipping the product to the Customer Service Department of LG. LG shall bear the cost of shipping the product back to the consumer after the completion of service under this limited warranty.

2. WHAT THIS WARRANTY DOES NOT COVER:

(1) Defects or damages resulting from use of the product in other than its normal and customary manner.

(2) Defects or damages from abnormal use, abnormal conditions, improper storage, exposure to moisture or dampness, unauthorized modifications, unauthorized connections, unauthorized repair, misuse, neglect, abuse, accident, alteration, improper installation, or other acts which are not the fault of LG, including damage caused by shipping, blown fuses, spills of food or liquid.

(3) Breakage or damage to antennas unless caused directly by defects in material or workmanship.

(4) That the Customer Service Department at LG was not notified by consumer of the alleged defect or malfunction of the product during the applicable limited warranty period.

(5) Products which have had the serial number removed or made illegible.

(6) This limited warranty is in lieu of all other warranties, express or implied either in fact or by operations of law, statutory or otherwise, including, but not limited to any implied warranty of marketability or fitness for a particular use.

(7) Damage resulting from use of non LG approved accessories.

(8) All plastic surfaces and all other externally exposed parts that are scratched or damaged due to normal customer use.

(9) Products operated outside published maximum ratings.

(10) Products used or obtained in a rental program.

(11) Consumables (such as fuses).

3. WHAT LG WILL DO:

LG will, at its sole option, either repair, replace or refund the purchase price of any unit that is covered under this limited warranty. LG may choose at its option to use functionally equivalent re-conditioned, refurbished or new units or parts or any units. In addition, LG will not re-install or back-up any data, applications or software that you have added to your phone. It is therefore recommended that you back-up any such data or information prior to sending the unit to LG to avoid the permanent loss of such information.

4. STATE LAW RIGHTS:

No other express warranty is applicable to this product. THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MARKETABILITY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN. LG SHALL NOT BE LIABLE FOR THE LOSS OF THE USE OF THE PRODUCT, INCONVENIENCE, LOSS OR ANY OTHER DAMAGES, DIRECT OR CONSEQUENTIAL, ARISING OUT OF THE USE OF, OR INABILITY TO USE, THIS PRODUCT OR FOR ANY BREACH OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING THE IMPLIED WARRANTY OF MARKETABILITY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE APPLICABLE TO THIS PRODUCT.
Some states do not allow the exclusive limitation of incidental or consequential damages or limitations on how long an implied warranty lasts; so these limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

5. HOW TO GETWARRANTY SERVICE:

To obtain warranty service, please call or fax to the following telephone numbers from anywhere in the continental United States:

Tel. 1-800-793-8896

Or visit http://us.lgservice.com. Correspondence may also be mailed to:
LG Electronics Service- Mobile Handsets, P.O. Box 240007, Huntsville, AL 35824

DO NOT RETURN YOUR PRODUCT TO THE ABOVE ADDRESS. Please call or write for the location of the LG authorized service center nearest you and for the procedures for obtaining warranty claims.